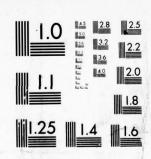


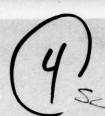
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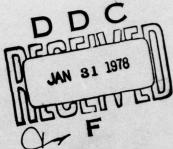


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SHIP SYSTEMS DEFINITION AND INDEX (SWBS STAGING DIAGRAMS)
FOR FF-1052 CLASS SHIPS

October 1976 Revised August 1977



Prepared for

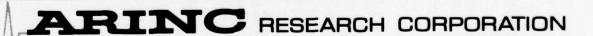
PEARL HARBOR NAVAL SHIPYARD

Under Contract N00140-76-D-0813-0086

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FOR FF-1652 CLASS SHIPS

October 1976 Revised August 1977

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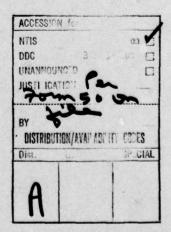
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SHIP SYSTEMS DEFINITION AND INDEX (SWBS STAGING DIAGRAMS) FOR FF-1052 CLASS SHIPS

August 1977

PEARL HARBOR NAVAL SHIPYARD



ABBREVIATIONS

A.P. After Perpendicular Allowance Parts List APL Anti-Submarine Rocket ASROC Anti-Submarine Warfare ASW Component Dictionary Code CDC C.L. - Centerline CNO Chief of Naval Operations Coordinated Shipboard Allowance List COSAL - Chief Petty Officer CPO Current Ship's Maintenance Project CSMP - Detection, Action, Response Technique DART - Department of Defense DoD D.W.L. - Designer's Waterline Equipment Identification Code EIC **Equipment Operational Sequencing System** EOSS FLT CINCS Fleet Commanders-in-Chief - Fleet Modernization Program **FMP** Forward Perpendicular F.P. Board of Inspection and Survey **INSURV** Maintenance Data Collection System MDCS Mobile Technical Unit MOTU Naval Air Systems Command NAVAIR Naval Electronics Systems Command NAVELEX - Naval Personnel NAVPERS Naval Sea Systems Command NAVSEA Naval Ships Engineering Center NAVSEC Naval Supply NAVSUP Navy Maintenance Management Field Office NMMFO Naval Ordnance Support Office NOSO Planned Maintenance System PMS - Preoverhaul Test and Inspection POT&I - Regular Overhaul ROH Ship Equipment Configuration Accounting System

SECAS

SSDI

SWBS

SYSCOM

TYCOM

Ship Systems Definition and Index

Ship Work Breakdown Structure

Systems Command

Type Commander

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1. INTRODUCTION

The Ship Systems Definition and Index (SSDI) is an orderly identification and structuring of the systems and subsystems that make up a ship. In defining ship systems as well as their boundaries and interfaces, the SSDI provides a common language for communicating information about ship configurations. The SSDI is thus useful to all naval activities involved in the life cycle operation, maintenance, modernization, and support of ships.

The SSDI presented herein is a revision of the FF-1052 Class SSDI* issued in October 1976. This revision incorporates changes to the coding identifications of systems, subsystems, and equipments to bring them into conformance with the current SWBS/SWABS/SECAS Staging Index for Surface Ships. The Staging Index, and its supporting Component Dictionary Code, is compatible with the Ships Work Breakdown Structure (SWBS) and the Ship Work Authorization Boundary (SWAB) descriptions.

This report discusses the general properties of SSDIs (Section 2); points out the many ways that SSDIs can be utilized by the various Navy activities (Section 3); provides general information on FF-1052 class ships (Section 4); and presents the SSDIs for the FF-1052 class (Section 5).

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^{*}ARINC Research Corporation, Ship Systems Definition and Index (SWBS Staging Diagrams) for FF-1052 Class Ships, Publication 1804-01-1-1547, October 1976.

Prepared for Pearl Harbor Naval Shipyard under Contract N00140-76-D-0813-0004.

2. PROPERTIES OF SSDI

The hierarchical concept on which the Ship Systems Definition and Index is based is illustrated in Figure 1. As can be seen, the SSDI is structured such that the summation of SSDI items at any level defines the total ship. An actual application of Figure 1, showing a typical ship breakdown from the major system to the subsubsystem level, is presented in Figure 2.

As illustrated by Figures 1 and 2, the SSDI is structured to:

- a. Provide a multi-level breakdown of the ship's configuration.
- b. Completely define the ship at each level.
- c. Contain no redundancies in its definition of the ship.
- d. Utilize the Ships Work Breakdown Structure (SWBS). This provides a standard language based on the same nomenclature and coding system that is mandatory for use on a Navy-wide basis.
- e. Utilize a standard Navy Staging Index for fourth-level identification codes and utilize a standard Navy Component Dictionary Code list (see Appendix A) for assigning fifth-level identification codes. The last two characters of the identifier are from this list, e.g., 2551M7.
- f. Tailor the SWBS to the configuration of a specific ship class. The ship class diagrams can in turn be tailored to the configuration of each ship within the class.

Figure 3 extends a portion of Figure 2 to an additional level of detail to demonstrate the information provided in the SSDI. As shown, the following are identified:

- a. System equipments
- b. System boundaries
- c. Shipboard maintenance work centers.

In some cases, notably for the more complex systems, the SSDI provides still further information in the form of line diagrams that depict:

- Major hardware items within the system boundaries, and their interrelationships.
- b. The verbal description shown on the system diagrams for selected SWBS-coded items. Those systems which are complex and interface with other complex systems are diagrammed as Figure 4 indicates.

c. The selected system's boundaries and interrelated SWBSs.

In a line diagram, solid lines within the system boundary denote equipments or components that are part of that particular system. Dashed lines show interfaces between those equipments/components and elements of other systems (see Figure 4).

Although some of the line diagrams show functional relationships, their specific purpose is to aid in the identification of ship systems. For that reason, the diagrams are greatly simplified from the actual configuration. For example, although there may be two or more identical forced-draft blowers in a combustion air system, only one is shown on the schematic (see Figure 4). This is because all blowers of the same type are part of the same system.

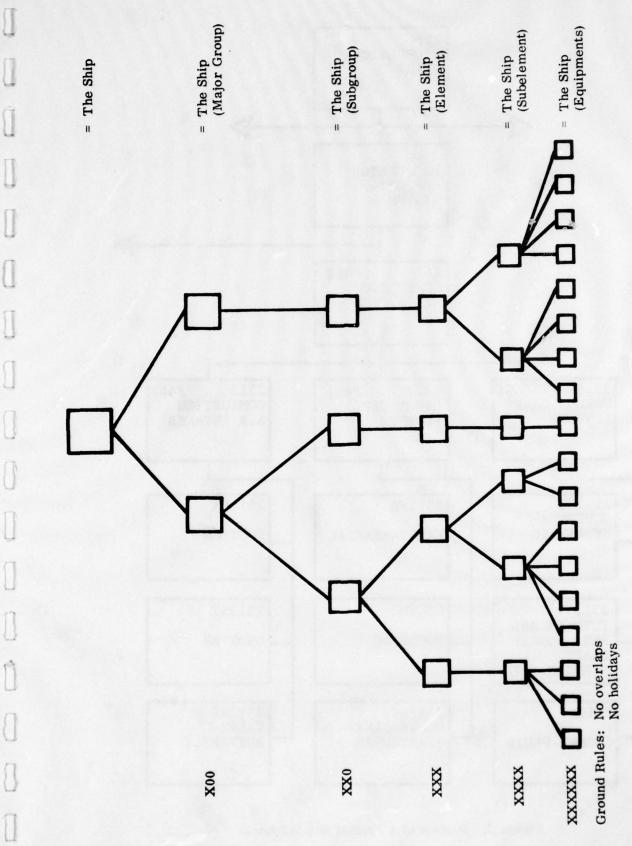


Figure 1. SSDI Concept

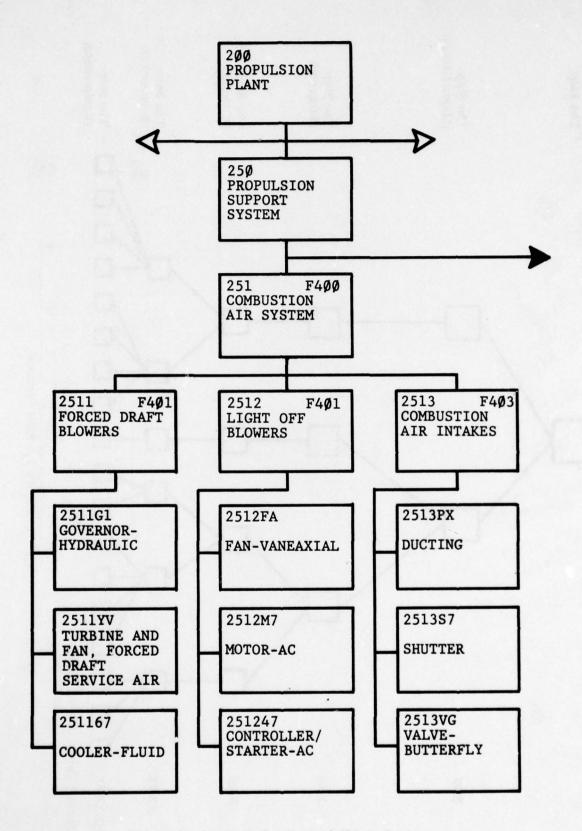


Figure 2. Portion of a Typical Ship's System

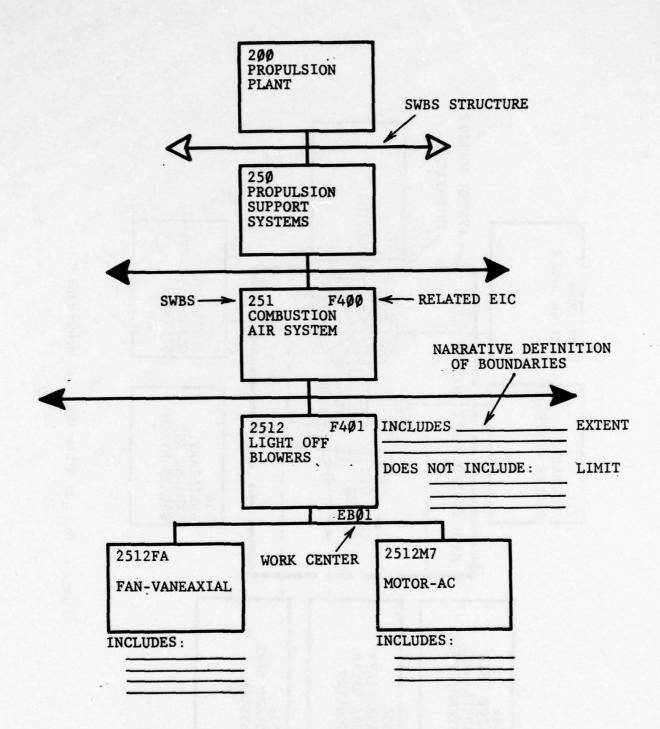


Figure 3. Example of System Diagrams Included in SSDI

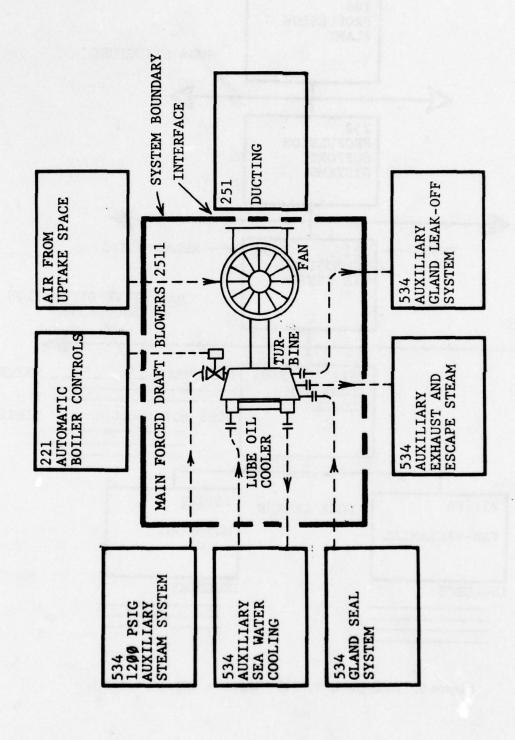


Figure 4. Example of Line Diagrams Included in SSDI

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3. USES OF SSDI

Throughout a ship's life, ship's force personnel submit a vast amount of system, equipment, and parts information to their type commander and fleet support activities. Requests for alteration, reports of maintenance action, work requests, and parts requisitions are but a few examples. In each instance the submitted information must be related to a specific, definable portion of the ship.

In carrying out their responsibilities, the type commander and the support activities must not only identify a specific item within the total ship, but also be aware of its interfaces. In planning alterations or modifications, for example, the technical systems commands (NAVSEA, NAVELEX, NAVAIR) must be able to identify the various systems that will be affected by a particular change to a ship's configuration. Also, when preparing for overhaul or other availabilities, the type commander and repair activities must be able to organize a work package on the basis of specific as well as interrelated ship systems. This is done to ensure that the work package is completely and effectively defined.

Since so many activities are involved in supporting the ship, it is necessary that both ship and support personnel use a single, uniform language when communicating configuration information. The Ship Systems Definition and Index provides this common language by describing a specific ship in terms common to all ships of the fleet. Potential uses of the SSDI are outlined below.

3.1 SSDI SUPPORT TO SHIP'S FORCE

3.1.1 Maintenance

- a. Serves as a checklist for planning and conducting inspection.
- b. Provides the basis for comparing repair items with alterations.
- c. Aids in establishing repair priorities.
- d. Assists in identifying shipyard, intermediate maintenance activities, and ship's force interfaces.
- e. Assists in making manpower assignments by ensuring that all systems of the ship are considered.
- f. Aids ship's force in "buttoning up" all systems for post-repair testing.
- g. Aids in alteration planning and analysis by showing possible interfaces in terms of various ship systems.
- h. Aids in standardizing shipboard validation procedures.

- i. Provides a means of identifying deficiencies in shipboard documentation such as the Coordinated Shipboard Allowance List (COSAL), Planned Maintenance System (PMS), etc.
- j. Provides a capability for reducing duplication in validation programs.
- k. Assists in identifying Equipment Identification Codes (EIC) necessary for Current Ship's Maintenance Project (CSMP) and Maintenance Data Collection System (MDCS).
- 1. Provides a standard language for maintenance documentation.
- m. Provides a common set of system descriptions for the development of maintenance instructions (PMS) and operating instructions (Equipment Operational Sequencing System, EOSS).

3.1.2 Operation

- a. Serves as a checklist for determining the completeness of EOSS coverage.
- b. Provides a means of identifying interrelationships among operating systems.
- c. Identifies the boundaries for system testing.
- d. Provides a means of determining test equipment and support requirements.

3.1.3 Training

- a. Provides a disciplined method for displaying a ship's configuration, thereby identifying training requirements from the equipment through the system level.
- b. Supports training shipboard operation/maintenance personnel in ship systems and system interfaces.

3.2 SSDI SUPPORT TO OTHER NAVAL ACTIVITIES

3.2.1 PERAs/Shipyards/Industrial Activities

- a. Defines ship systems for alteration and repair planning.
- b. Provides a standard indexing language for:
 - Ship Alteration and Repair Package (SARP)
 - Specification preparation
 - Cost estimating and progressing
 - Drawing numbering

- Material identification and ordering
- Pre-Overhaul Test and Inspection (POT&I) planning and organization
- Management information systems.
- c. Assists in determining priorities of work by displaying the affected equipment in relation to its system.

3.2.2 Ship Equipment Configuration Accounting System (SECAS)

- a. Provides a standard structure for total shipboard validation.
- b. Provides information for determining the desired level of validation.

3.2.3 Technical System Commands (NAVSEA, NAVELEX)

- a. Aids in determining the SWBS identification of alterations for inclusion in shipalt records and subsequently in other Navy data bases.
- b. Identifies ship systems such that the impact of alterations can be determined and decisions made concerning recommended priorities for inclusion in the Fleet Modernization Program (FMP).
- c. Provides a means for ensuring that standard failure-data correlation and analysis is performed to the desired level.

3.2.4 Type Commanders (TYCOMs)

- a. Aids in determining work priorities by displaying the affected equipment in relation to its system.
- b. Identifies the system such that the impact of alterations can be determined and decisions made concerning recommended priorities for inclusion in the FMP.
- c. Enables the TYCOM to properly identify and budget the system for repairs.

3.2.5 Naval Ships Engineering Center (NAVSEC)

- a. Provides a vehicle for ensuring that standard failure-data correlation and analysis is performed to the desired level.
- b. Defines the systems for design consideration and subsequent corrective measures such as the Detection, Action, Response Technique (DART) program.
- c. Provides information for determining the required level of repair parts support requirements.

3.2.6 Fleet Support Activities

- a. Identifies shipboard systems as an aid in determining personnel and material requirements in response to solving specific ship problems.
- b. Serves as a tool for establishing required support capabilities (people and equipment).

4. GENERAL INFORMATION, FF-1052 CLASS

The data given in this section are generally applicable to the FF-1052 class. For individual ships of this class, consult the appropriate Ship's Information Book.

4.1 BASIS OF HULL MEASUREMENTS

The designers waterline (D.W.L.) is the waterline corresponding to the normal displacement and draft. This waterline is 14'9" above and parallel to the molded base line, and is the draft datum line for showing heights of superstructure, rigging, etc., as authorized by NAVSEA. This datum line is measured from the bottom of the keel plate amidships, which is 1/4" below the molded base line.

The forward perpendicular (F.P.) is a vertical passing through the point where the designer's waterline and the forward side of the ship's stern intersect. The after perpendicular (A.P.) is a vertical passing through the point where the designer's waterline and the molded line of the ship's stern intersect.

4.2 GENERAL DIMENSIONS AND CHARACTERISTICS

Length, between perpendiculars	415' - 0"
Length, overall	438' - 0"
Breadth, extreme	46' - 7 1/4"
Draft above bottom of keel amidships (D.W.L.)	14' - 9 7/8"
Draft above lowest projection below keel (D.W.L.)	24' - 8 1/4"
Displacement to D.W.L. (salt water)	3,945 tons

4.3 HEIGHTS ABOVE D.W.L.

(D.W.L. 14' - 9" above molded base line)

Quadmast, including antenna No. 4-2	104' - 2 1/2"
C. L. of homing beacon	107' - 6 1/8"
C. L. of forward anchor light	44' - 0"
C. L. of masthead light	56' - 11 1/4"
C. L. of towing lights	
Upper	62' - 11 1/4"
Lower	50' - 11 1/4"
C. L. of sidelight (P/S)	33' - 0 3/4"
C. L. of blinker light (P/S)	72' - 7 1/2"
C. L. of range light	92' - 10"
C.L. of speed and aircraft warning lights (P/S)	118' - 1 5/8"
C. L. of ASW light	98' - 11 1/2"

C.L. of man overboard and breakdown	lights	(2)	
and ships task lights (3)			

118' - 7 3/8"
112' - 1 3/8"
105' - 7 3/8"
28' - 9"
19' - 9 7/16"
18' - 5 7/16"
17' - 3' 5/16"
101' - 11 1/2"
81' - 4 1/2"
92' - 1 1/2"
67' - 1 1/2"
58' - 1 1/2"
49' - 1 1/2"
42' - 6 1/8"
44' - 11 1/2"
40' - 1 1/2"
37' - 7 1/8"
34' - 6 1/8"
36' - 5 1/8"
31' - 6 1/2"
30' - 9 1/2"
32' - 6 1/8"
35' - 10 1/2"
26' - 6 1/8"
24' - 6 1/8"
23' - 5 1/4"

4.4 SMALL BOATS

No.	Name	Each	Total
16	CO ₂ Lifeboats	15	240
1	26' - 0" Personnel Boat	16	16
1	26' - 0" Motor Whaleboat	22	22
	TOT	AL	278

4.5 BERTHING ACCOMMODATIONS

Bert	hs	Lockers	
Officers	17	Type A	15
CPO	15	Type B	33
Crew	225	Peacoat	11
200 A 124		CPO (Blue Uniform)	1
		CPO (Overcoat)	2

4.6 CAPACITY OF BOOMS AND CRANES

Boat Boom	3900 lb
Bathythermograph Boom	400 lb
ASROC and Torpedo Handling Boom	4000 lb
Mk 37 and EX 10 Torpedo Trolley Hoist - No. 2	4000 lb
Torpedo Magazine Crane - No. 1	1000 lb
ASROC Handling System	1500 lb

4.7 FRAME SPACING

Frames are numbered from 0 at the forward perpendicular to 166 at the after perpendicular. Frame spacing is 30" throughout.

Ships of the FF-1052 class are longitudinal framed vessels. Transverse framing does not exist at each frame numbered location. Transverse webs are spaced approximately every three frames between Frame 18 and the stern, and every two frames forward of Frame 18.

Part frames in the forward overhang are designated as "A", "B", "C", "D", "E", "F", and "G".

4.8 TANK CAPACITIES AT FULL LOAD CONDITIONS FOR FF-1052 - 1077

	Tank	Gallons	Tons
a.	Potable Water		
	5-107-1-W	1,775	6.59
	5-107-2-W	1,773	6.59
	5-114-1-W	3,277	12.17
	5-114-2-W	3,277	12.17
	Total	10,104	37.52
b.	Reserve Feed Water		
	3-92-1-W	2,351	8.73
	3-92-2-W	2,351	8.73
	5-107-0-W	3,280	12.18
	5-110-0-W	3,622	13.45
	Total	11,604	43.09
c.	Lube Oil		
	5-101-1-F	1,078	3.70
	5-104-3-F	1,034	3.55
	Total	2,112	7.25

	Tank	Gallons	Tons
d.	<u>JP-5</u>		
	5-125-0-J	12,797	38.79
	5-137-0-J	13,661	41.41
	Service Tank	1,000	3.03
	Total	27,458	83.23
e.	Fuel Oil		
	(1) Storage		
	5-29-1-E	4,871	17.15
	5-29-2-F	4,871	17.15
	5-41-1-F	15,856	55.83
	5-41-2-F	15,856	55.83
	5-48-1-F	15,819	55.70
	5-48-2-F	15,819	55.70
	5-54-1-F	20,888	73.55
	5-54-2-F	20,888	73.55
	5-61-1-F	10,724	37.76
	5-61-2-F	10,724	37.76
	5-121-1-F	6,558	23.09
	5-121-4-F	5,430	19.12
	5-126-1-F	6 ,16 8	21.72
	5-126-2-F	6,168	21.72
	5-132-1-F	7,231	25.46
	5-132-2-F	7,231	25.46
	5-150-0-F	8,219	28.94
	Total	183,321	645.49
	(2) <u>Service</u>		
	4-76-0-F	12,320	43.38
	5-61-0-F	18,503	65.15
	Total	30,823	108.53
	Total Fuel Oil	214, 144	754.02

5. SSDI FOR FF-1052 CLASS SHIPS

5.1 SSDI INDEX

The SSDI for FF-1052 class ships is presented on the following pages, in the indicated order.

Index Diagrams	Page
Overall	21
100 - Hull Structure	22
200 - Propulsion Plant	23
300 - Electric Plant	24
400 - Command and Surveillance	25
500 - Auxiliary Systems	26
600 - Outfit and Furnishings	27
700 - Armament	28
800 - Integration/Engineering	29
900 - Support Services	30
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300 - Electric Plant	91
400 - Command and Surveillance	107
500 - Auxiliary Systems	145
600 - Outfit and Furnishings	197
700 - Armament	223
800 - Integration/Engineering	237
900 - Support Services	243

The Legend of Symbols applies to the system diagrams that accompany certain of the index diagrams.

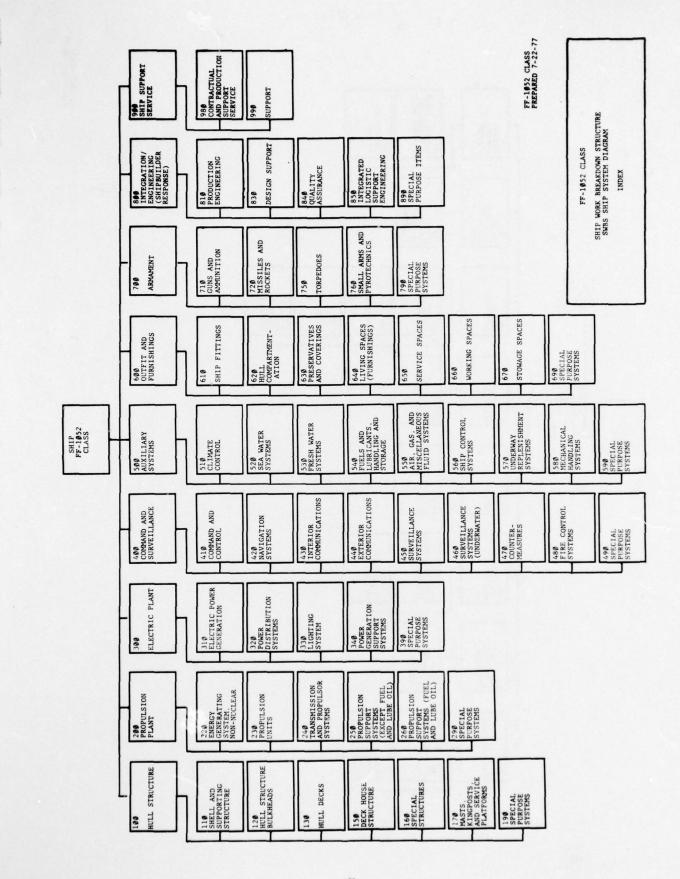
5.2 GENERAL COMMENTS

The following general comments apply to the FF-1052 class SSDI.

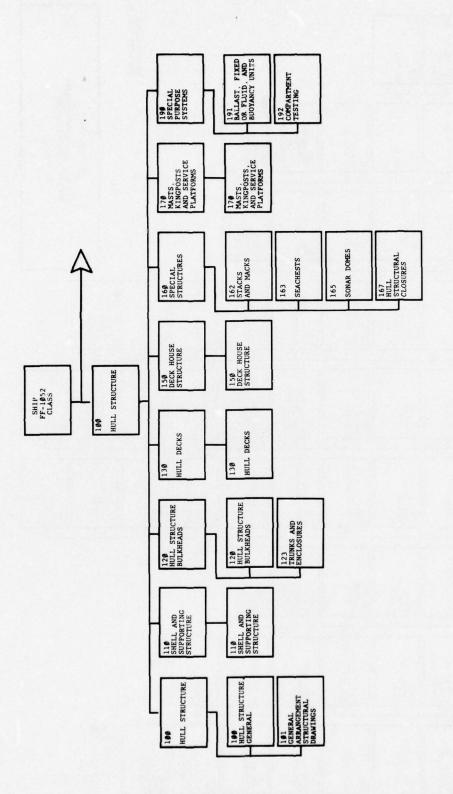
a. This SSDI is structured to encompass the entire FF-1052 class, i.e., all identified combinations of systems and equipments have been included. Individual ships will not necessarily have all identified components because of such factors as ship alterations that have/have not been accomplished, variations due to construction differences, etc.

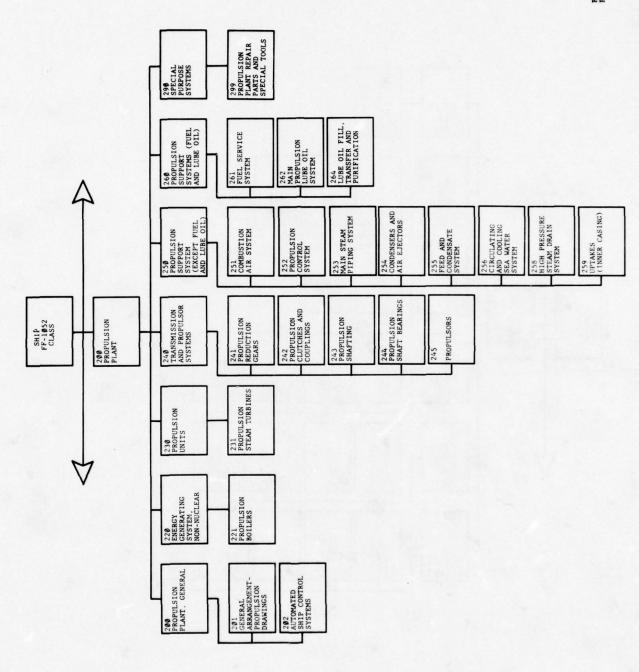
- b. In each SWBS group, elements X01 through X09 are used for general requirements, and element X98 for operating liquids. These non-hardware elements are indicated by dashed blocks.
- c. To maintain continuity of having equipments/components at the fifth level, some element titles are repeated at the fourth and fifth levels and appropriately numbered, e.g., element 163.
- d. The term "With System", or "W.S.", indicates that the item is coded with the system of which it is a part or which it serves.
- e. EIC cross-references are entered only in blocks with a direct cross-reference, i.e., same system, subsystem, and/or equipment as a SWBS classification.
- f. Work center assignments are representative. Use of the SSDI for specific ships of the class will require verification of applicable work centers.

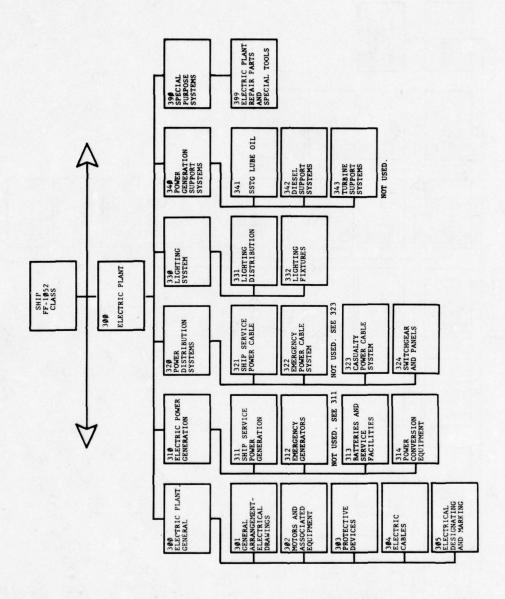
SHIP SYSTEMS DEFINITION AND INDEX FOR FF-1052 CLASS SHIPS

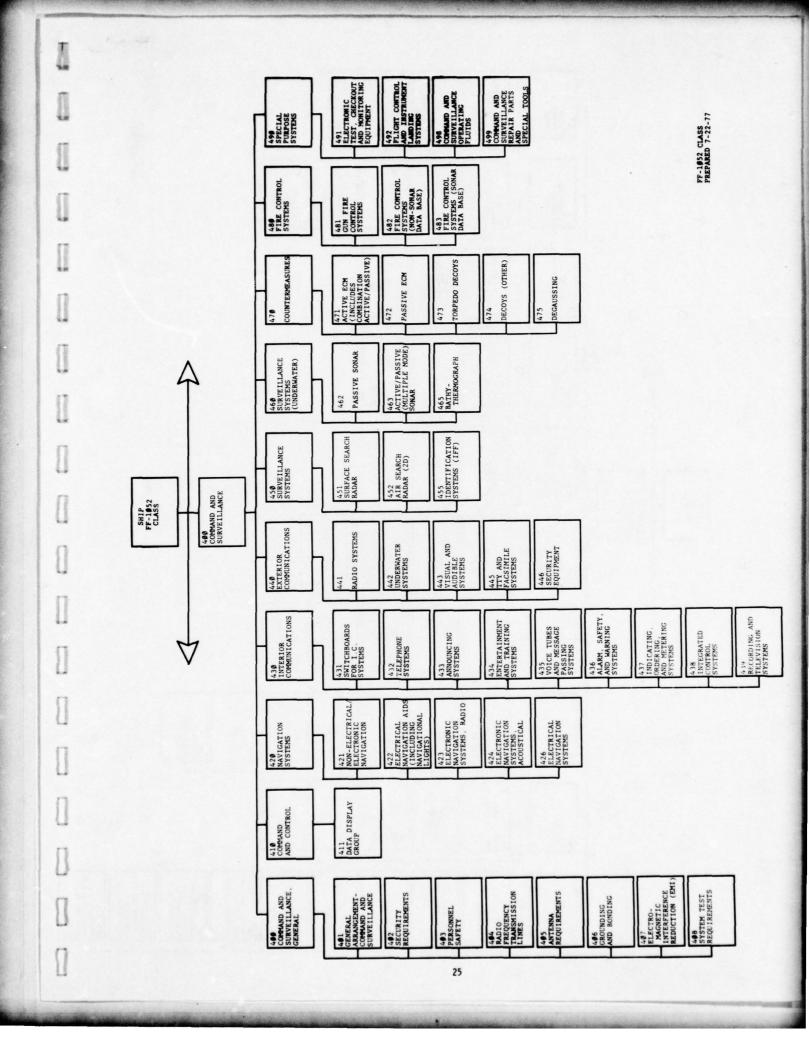


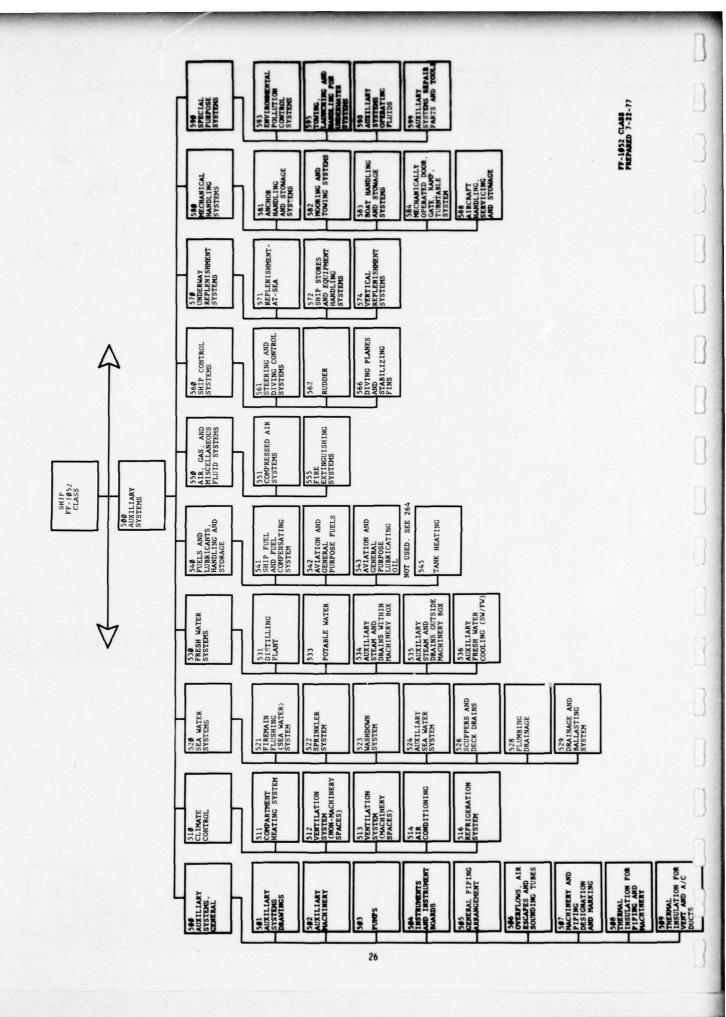
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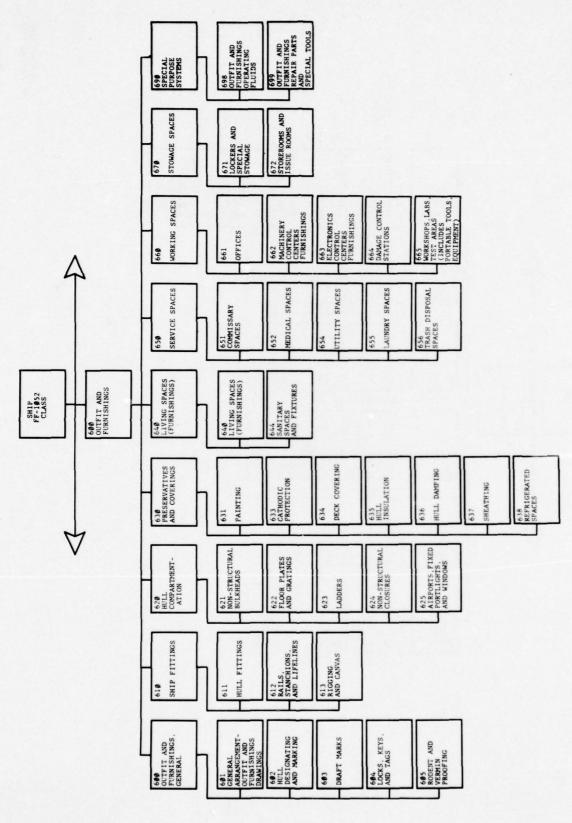


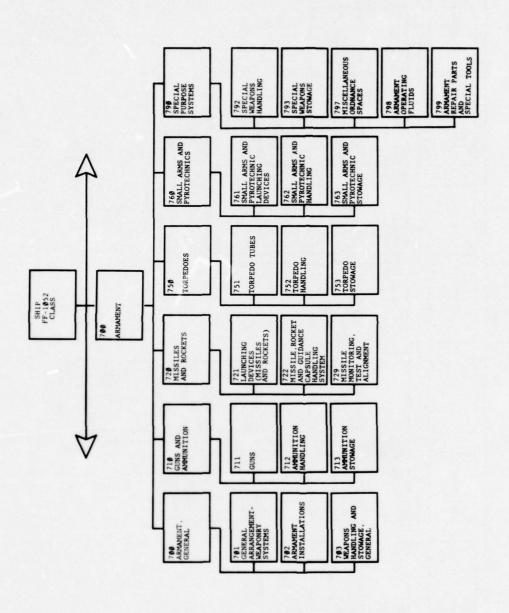


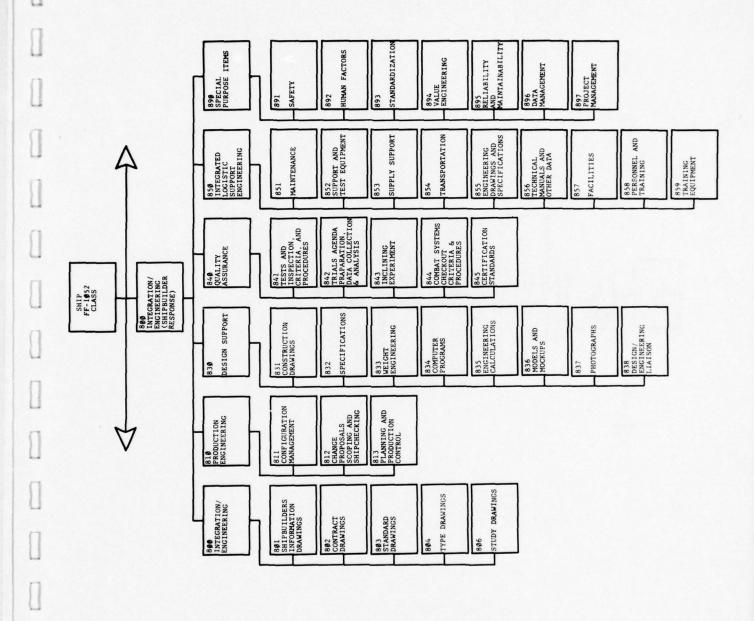


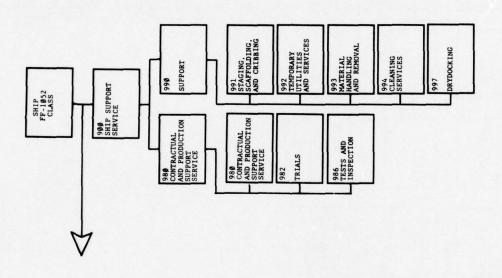










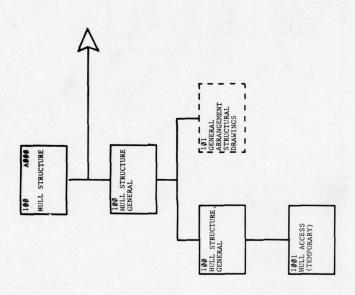


	LEGEND OF SYMBOLS
SYMBOL	DESCRIPTION
-84-	GLOBE VALVE
&-	GLOBE VALVE, LOCKED OPEN
ॐ-	GLOBE VALVE, LOCKED CLOSED
-&-	GLOBE VALVE, MANUALLY OPERATED IN PLACE OR PNEUMATICALLY FROM MAIN DECK
-\$-	AIR MOTOR OPERATED VALVE
-处-	GLOBE VALVE, WITH MANUAL GEAR OPERATED IN PLACE AND AJACENT SPACE
- \$	GLOBE VALVE, ANGLE
-181-	GLOBE VALVE, REMOTE OPERATED
-💢	GLOBE STOP CHECK VALVE
->>>	GATE VALVE
	BUTTERFLY VALVE
₹	SWING CHECK VALVE
小小	LIFT CHECK VALVE
	NEEDLE VALVE
-6-	STOP COCK PLUG OR CYLINDER VALVE 3 WAY, 2 PORT
-XX-	CONTROLLED VALVE, BOILER FEED
一岛	PRESSURE REDUCING OR PRESSURE REGULATING INCREASED ACTUATING PRESSURE CLOSES
一冬	PRESSURE REDUCING OR PRESSURE REGULATING DECREASED ACTUATING PRESSURE CLOSES
奴	PRESSURE REGULATING VALVE AIR PILOT OPERATED
₩	PUMP GOVERNOR
一段	THERMOSTATICALLY CONTROLLED VALVE
母	DUMP VALVE
名	PILOT VALVE
→ Øiii	FLOAT OPERATED VALVE
7	ANGLE LIFT CHECK VALVE
-14-	CONTROL VALVE

NOTE: VALVES OTHER THAN THE GLOBE VALVE MAY USE THE MODIFIERS SHOWN. IN ADDITION COMBINATIONS OF VALVE MODIFIERS MAY BE USED.

	LEGEND OF SYMBOLS
SYMBOL	DESCRIPTION
\$	VENT
N	BOILER DRUM SAFETY VALVE
4	ANGLE RELIEF VALVE (ENCLOSED SPRING)
- P	COMBINED EXHAUST AND RELIEF VALVE
ذ	PRESSURE GAUGE
Ø ^{VP}	VACUUM - PRESSURE GAUGE
⊘ DX	DUPLEX PRESSURE GAUGE
Φ ^Δ	ABSOLUTE PRESSURE GAUGE
Y	DISTANT READING PRESSURE GAUGE
Y	DISTANT READING THERMOMETER
P	SIGHT READING THERMOMETER
— Q —	THERMO ELEMENT
	METER, SIGHT FLOW
⊣¦¦⊢	PRESSURE BREAKDOWN ORIFICE
†	CPEN FUNNEL
	SPECTACLE FLANGE
8	DUPLEX STRAINER
-仝-	Y STRAINER
	STRAINER
-\$	IMPULSE TRAP & STRAINER
$\widetilde{\boxtimes}$	SALINITY CELL
	ORIFICE PLATE
<u> </u>	MOTOR COLTROLLER
-Û-	TEST TEE
-	DESUPERHEATER
-000	MANIFOLD
	EDUCTOR

SYMBOL	LEGEND OF SYMBOLS DESCRIPTION
37 MBOL	PUSHBUTTON & INDICATOR LIGHT
9	PUSHBUTTON
# 1	EXPANSION JOINT
	GAGE GLASS
-12-	DUPLEX (TWIN BASKET) MAGNETIC STRAINER
Φ	THERMOCOUPLE CONNECTION OR THERMOSTAT
甲	THERMOMETER ANY ANGLE DIAL, BARE BULB TYPE DIRECT READING
甲	THERMOMETER DISTANT READING BARE BULB TYPE
-0-	CONSTANT FLOW FITTING
Ÿ	FUNNEL WITH SWING COVER
->+	CONCENTRIC REDUCER
-D-	REDUCER
中	HOSE ADAPTER
	SOUND ISOLATION FITTING
	FLEXIBLE HOSE
-123-	FLOW MEASURING NOZZLE
ショー	SHAFT TURBINE END, COUPLING OIL SPRAY
-31-	ANGLE STOP VALVE
	BALL CHECK STOP VALVE
*	PRESSURE VENT
- \[\sqrt{-}	LOCK SHIELD VALVE, HIGH LIFT
-130-	BOTTOM BLOWDOWN VALVE, HIGH LIFT
~~	TOP BLOWDOWN VALVE, HIGH LIFT
平	AIR OPERATED VALVE SPRING CLOSING
₩	AUTOMATIC RECIRCULATING VALVE
- 	CROSS VALVE
-P	MOTOR PRESSURE SWITCH
-[5]	LIMIT SWITCHES



FF-1052 CLASS PREPARED 6-22-77

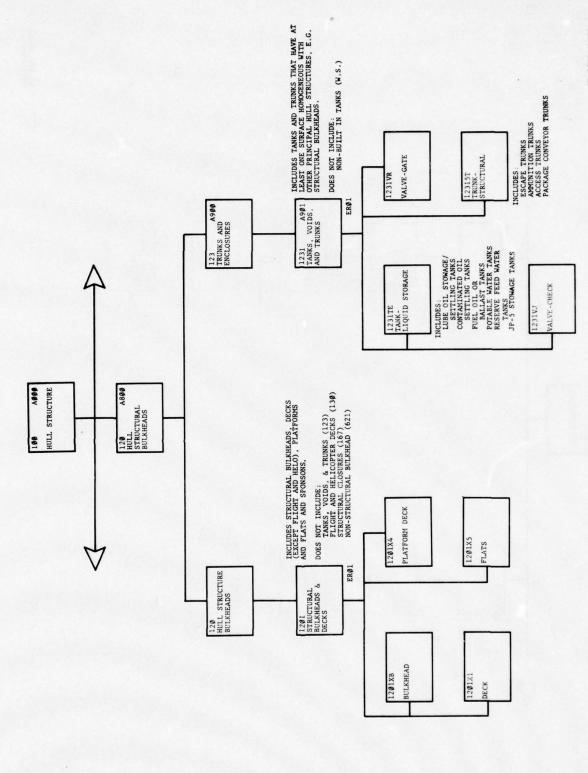
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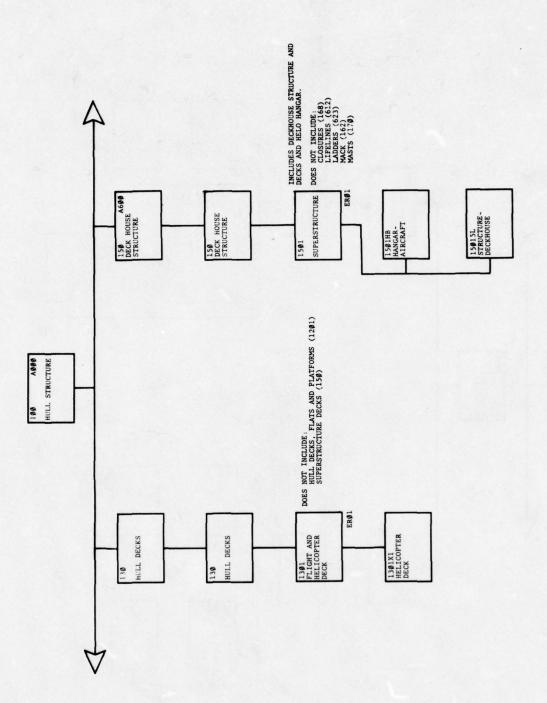
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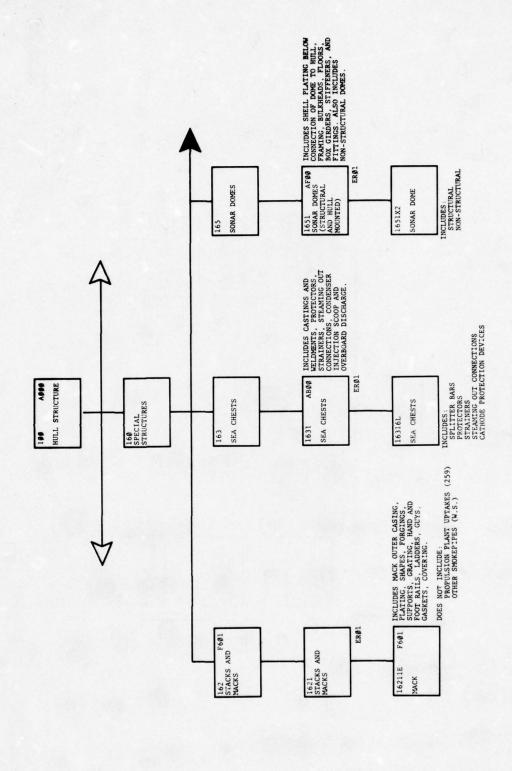
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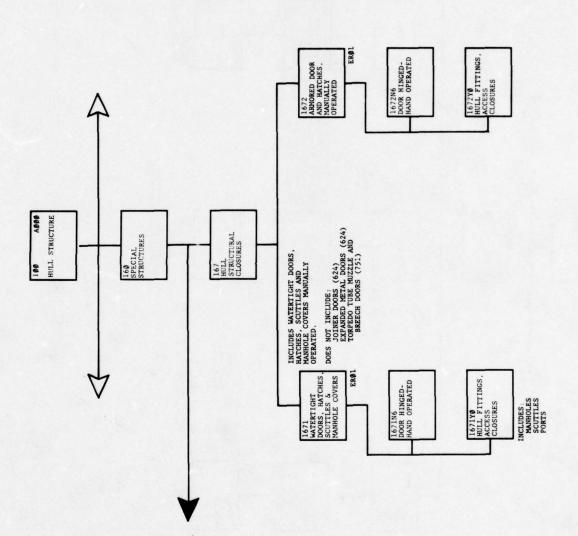


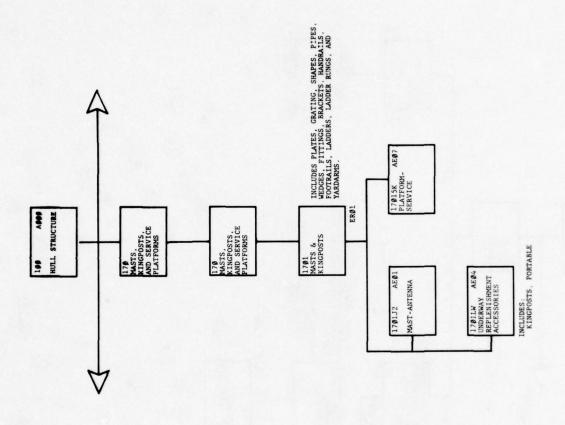
FF-1052 CLASS PREPARED 6-22-77

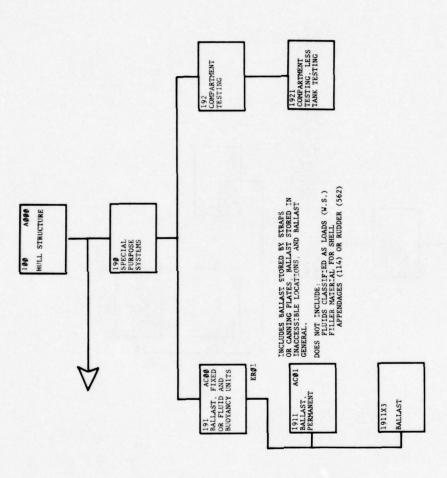
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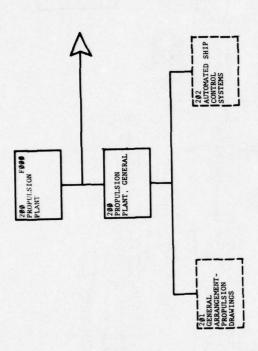


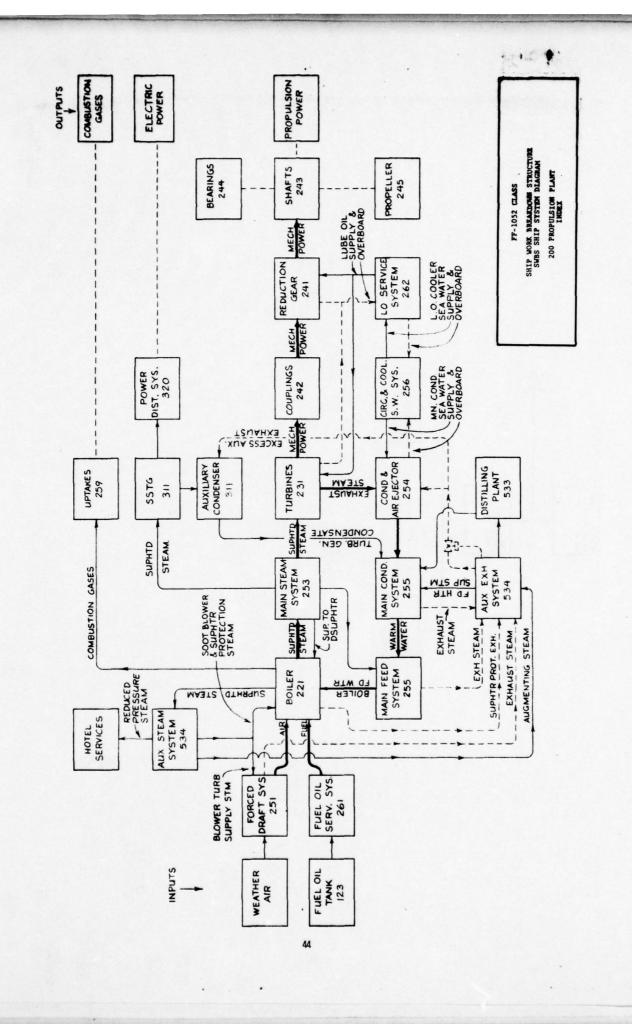


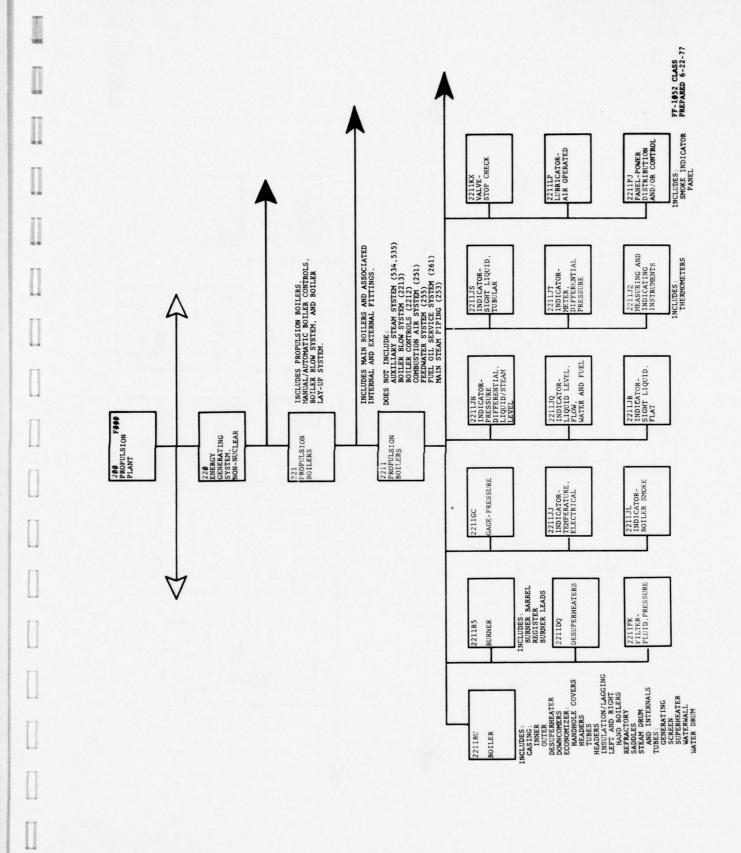


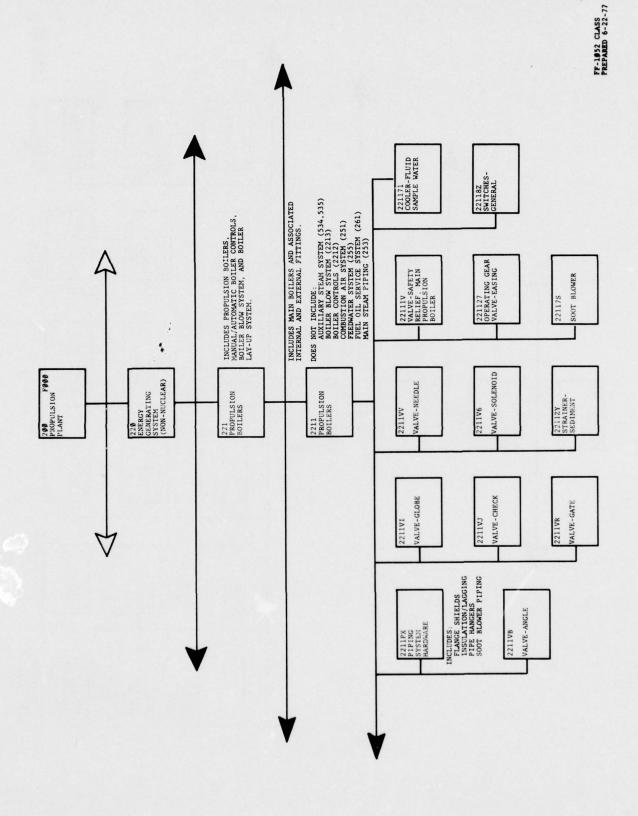


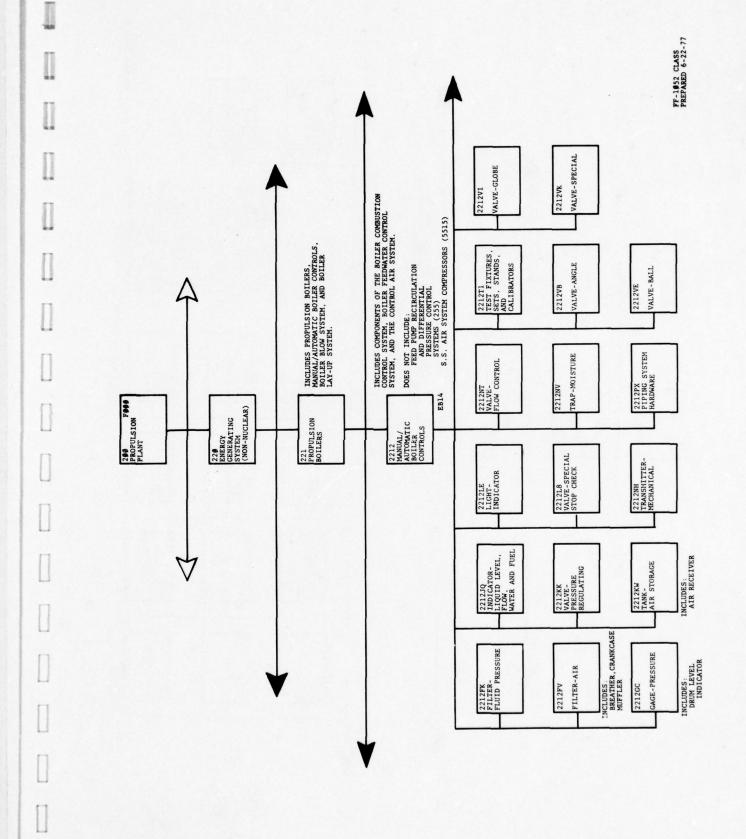


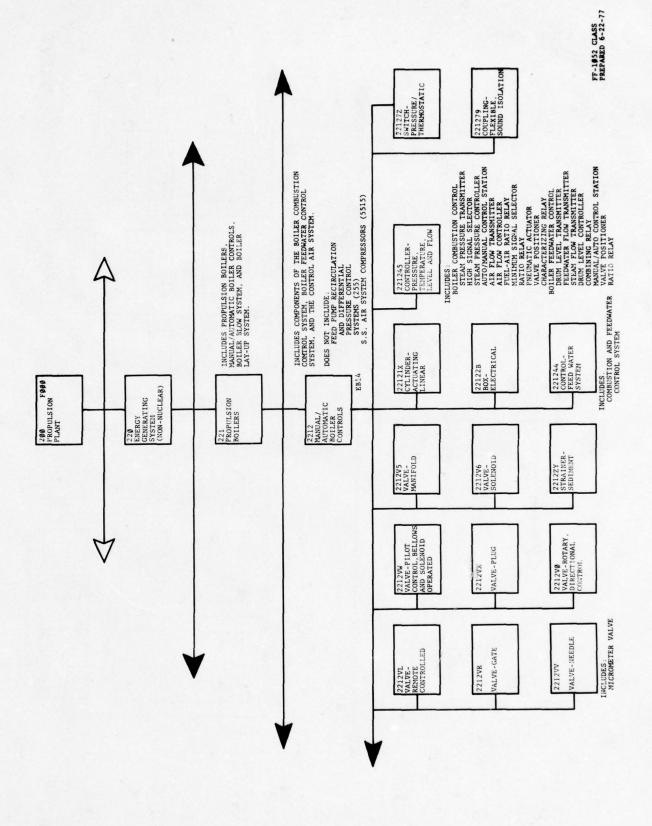


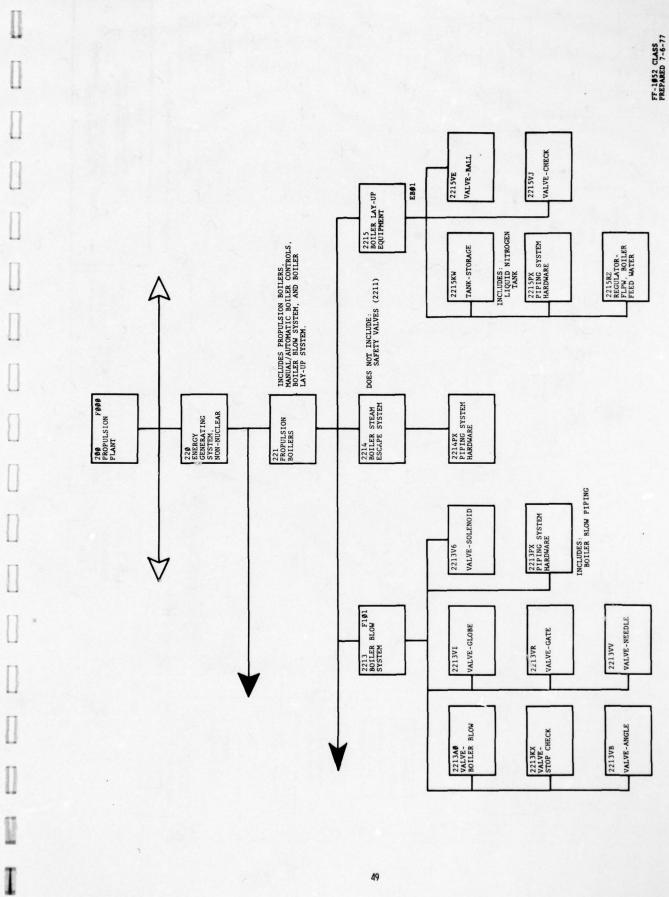


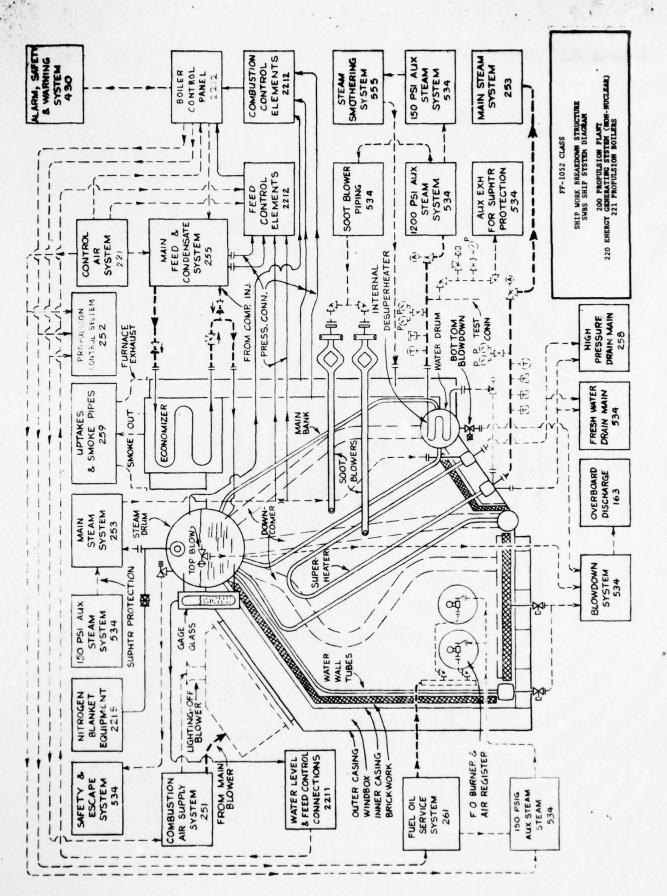


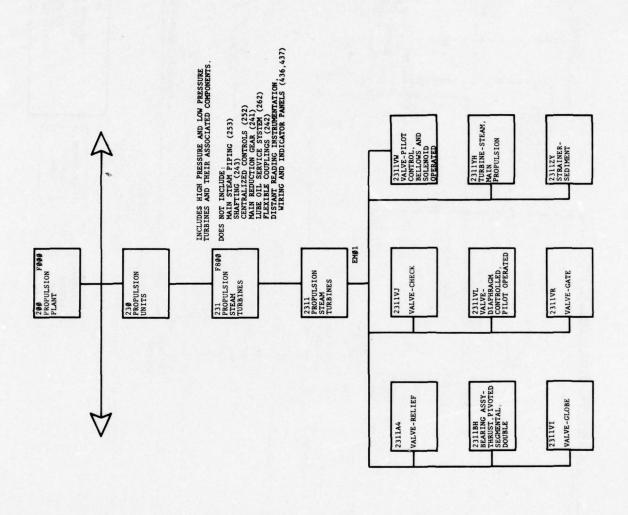


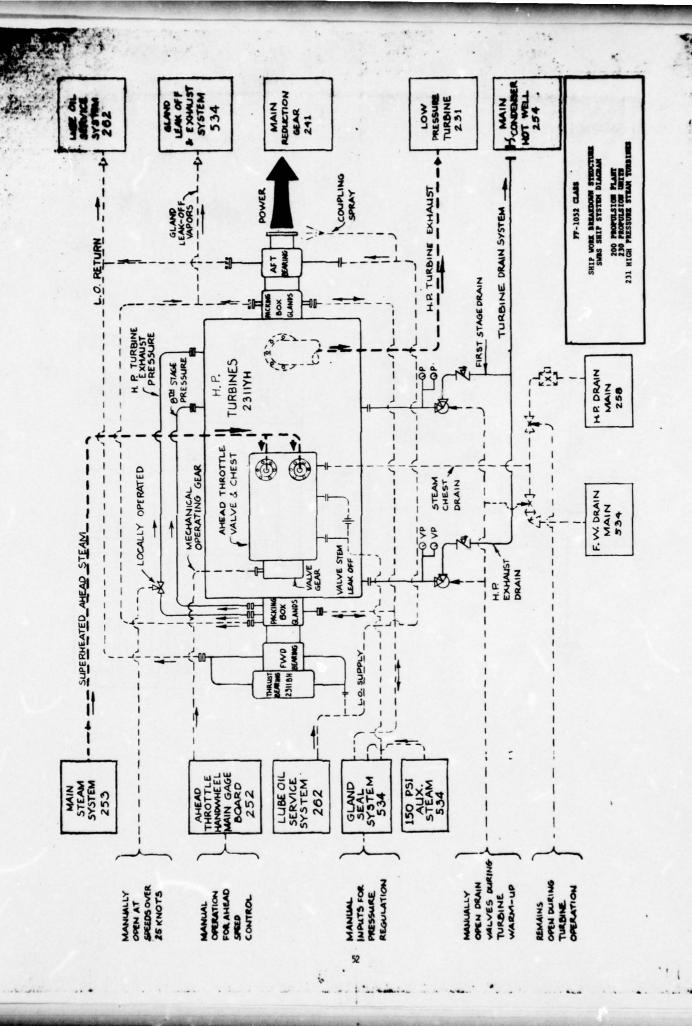


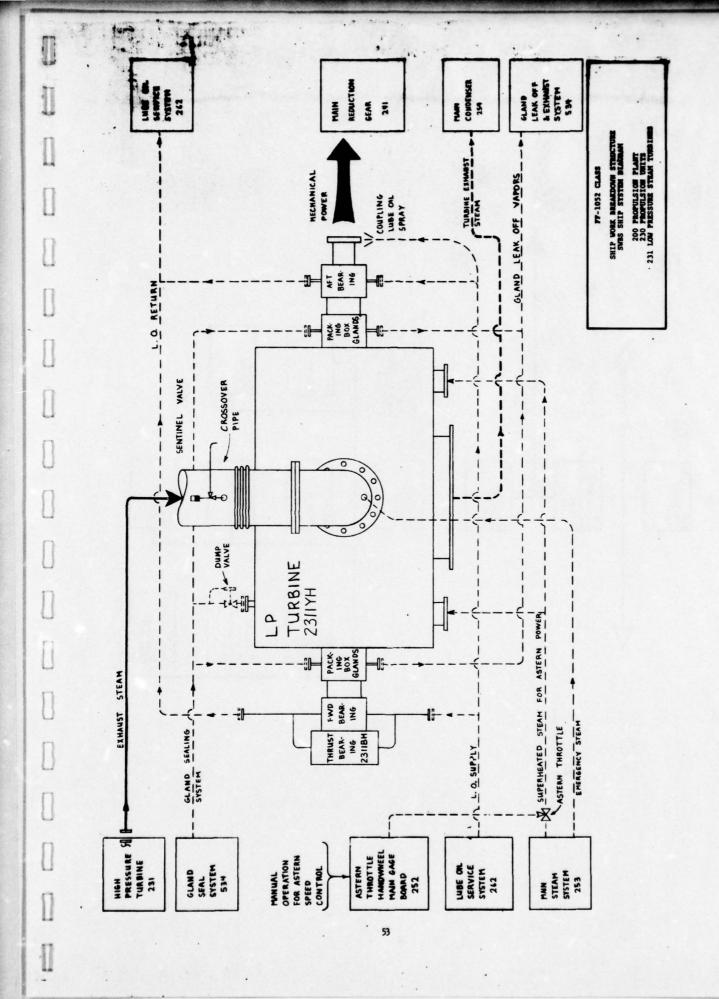


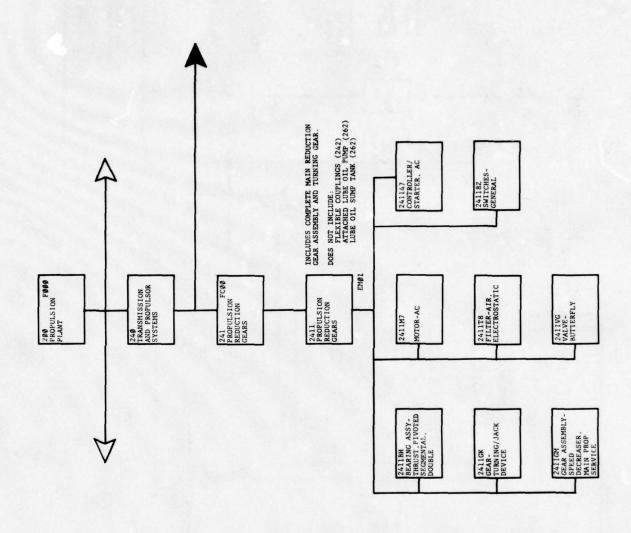


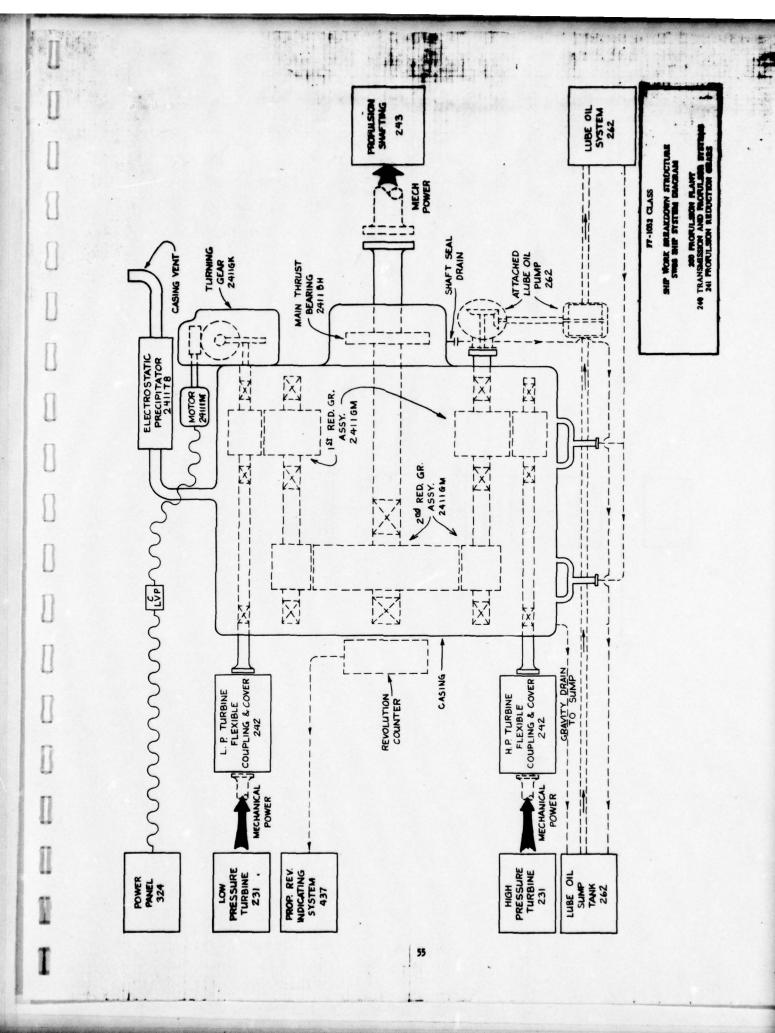


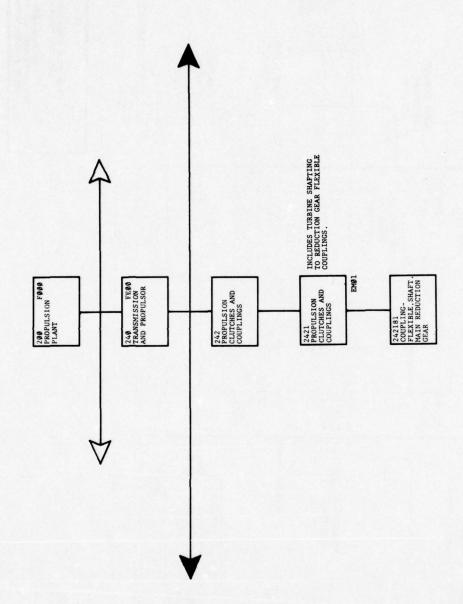


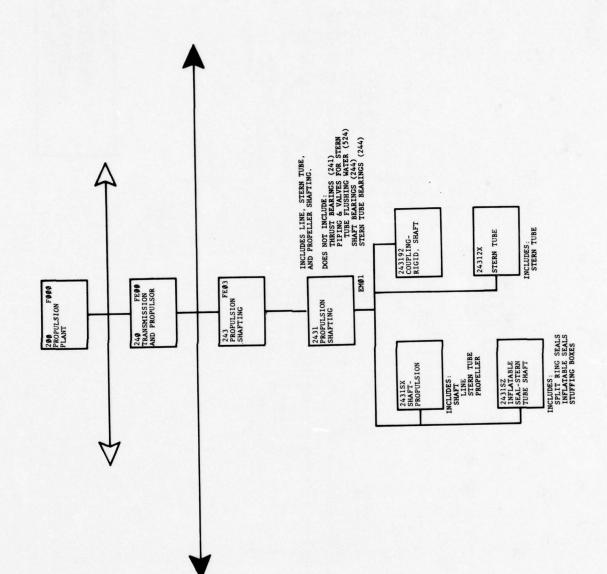










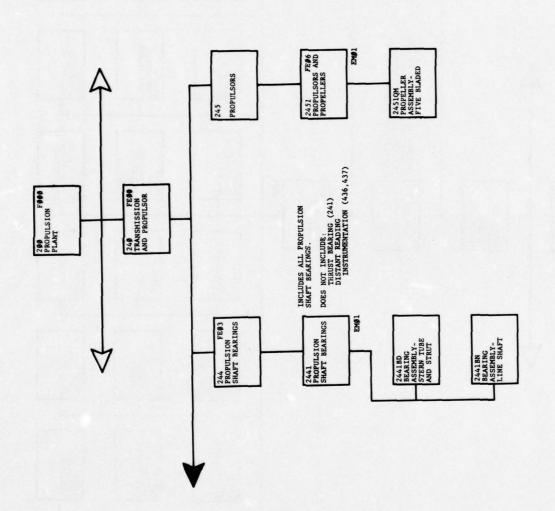


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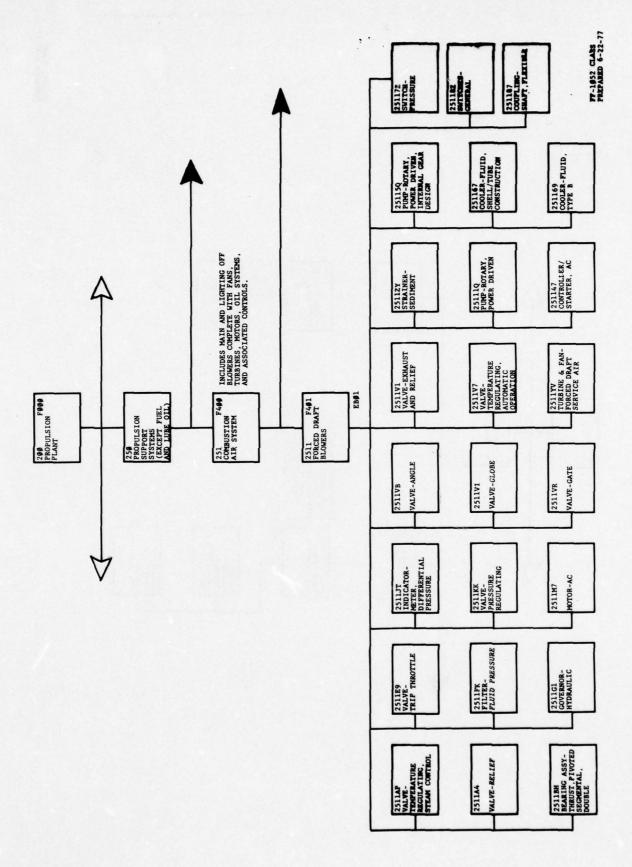
PROPELLER 245 PROPELLER --249 TRANSMISSION PLANT 249 TRANSMISSION AND PROPULSOR SYSTEMS 243 PROPULSION SHAFTING BEARING 2441BD 2+315X & PROP STRUT SHIP WORK BREAKDOWN STRUCTURE SWBS SHIP SYSTEM DIAGRAM FF-1052 CLASS STERN TUBE BEARINGS 2441BD LATT SEAL LUBRICATION STERN TUBE 24312X SHAFT SEAL/ STUFFING BOX 7 243152 A-DRAIN TO -FLUS HING BILGE STERN TUBE INTATABLE SEAL AIR 551 COUPLING 243192 BOX 24315Z LUBRICATION, FLUSHING & COOLING VVATER BKHD121 243 TORSION METER LINE SHAFT BEARING 2441BN Sump LLINE SHAFT BULKHEAD STUFFING BOX 24315Z **BKHD 107** MACHINERY COOLING REDUCTION 524 GEAR 1+7 58

MAIN PROPULSION

SHAFTING

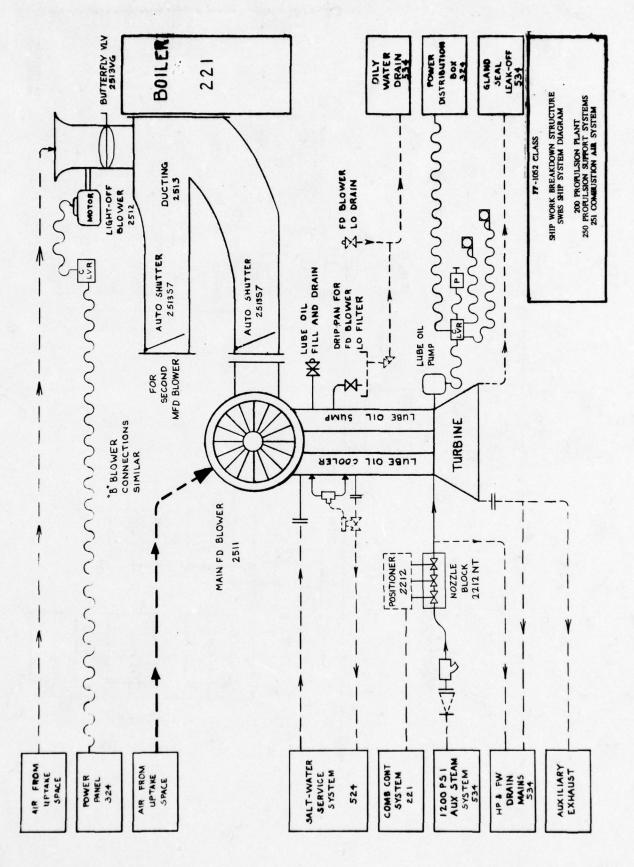


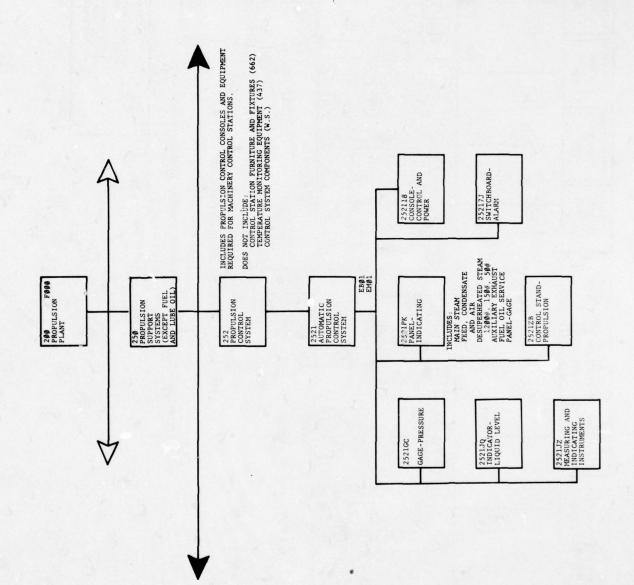
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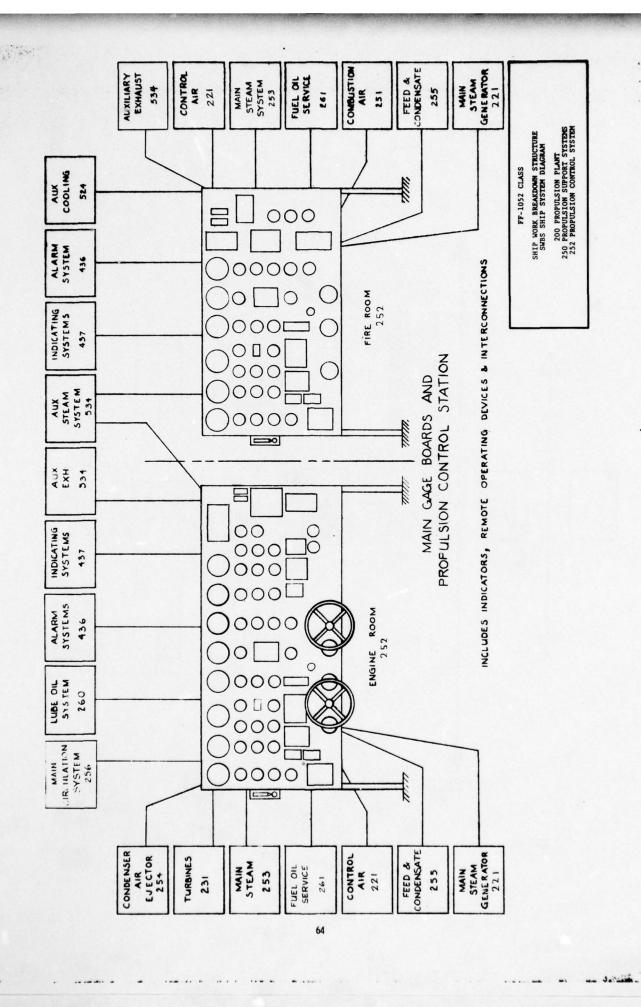


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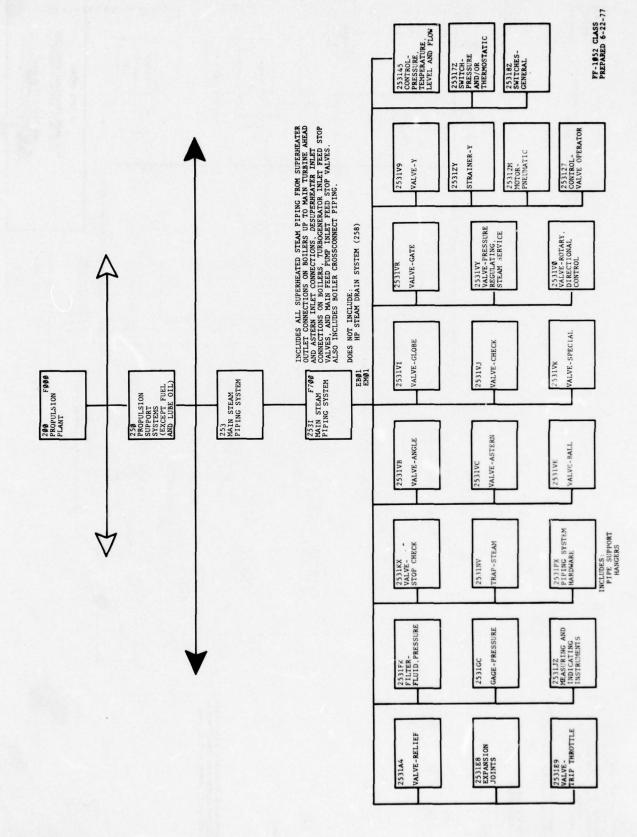
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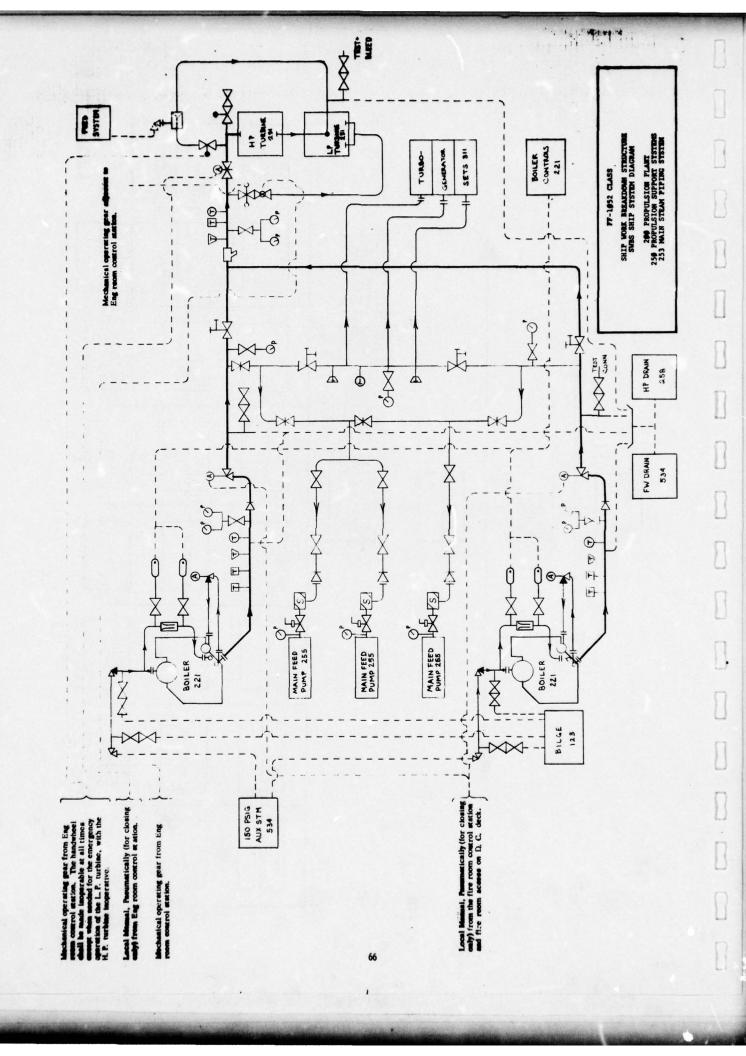


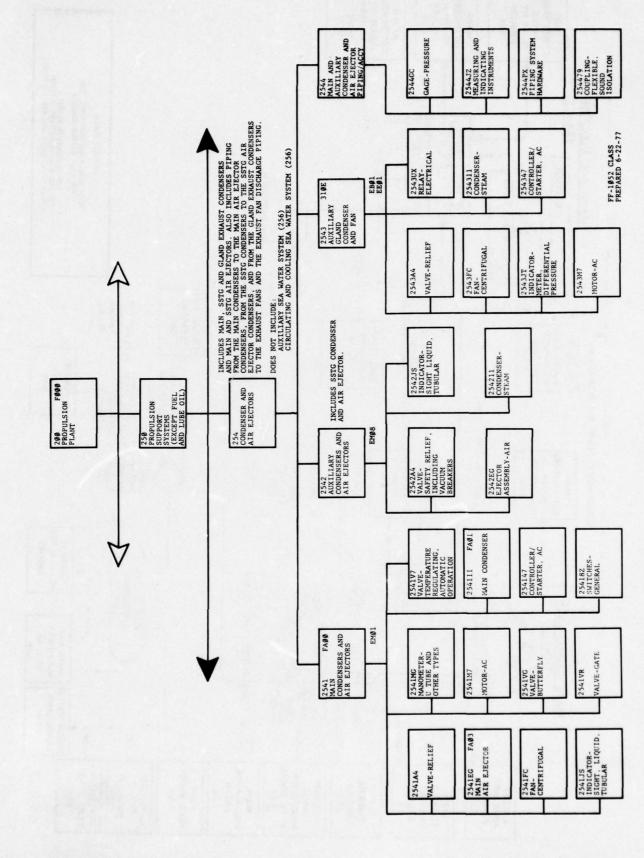




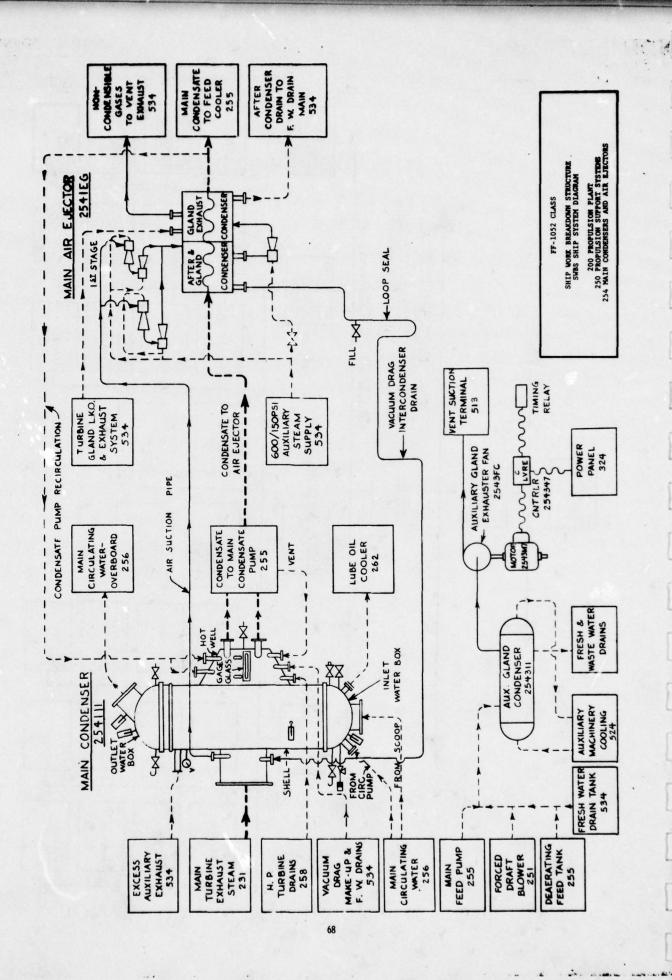
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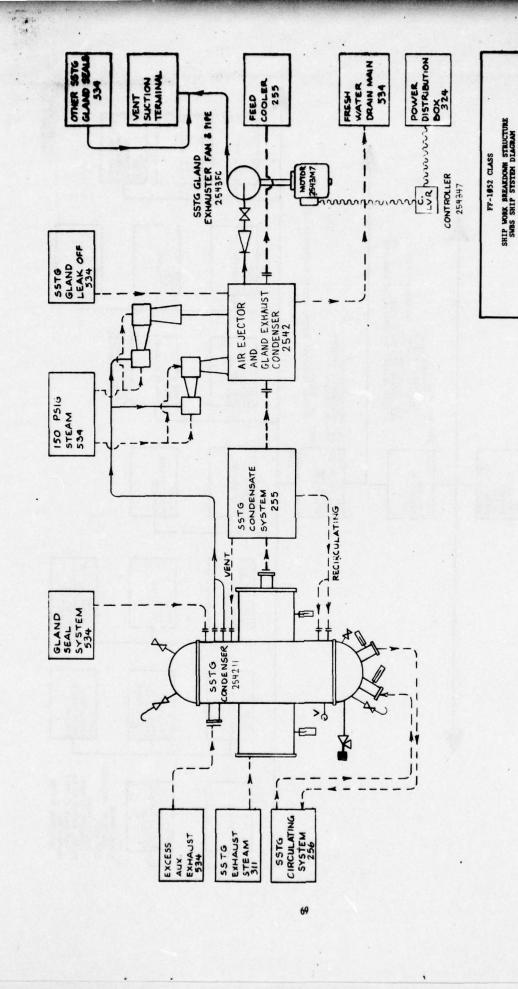




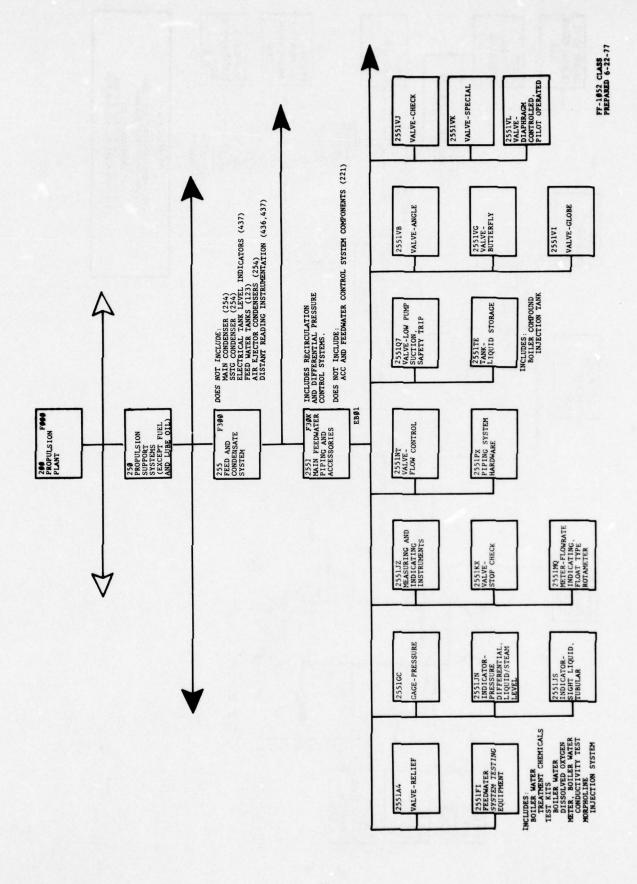
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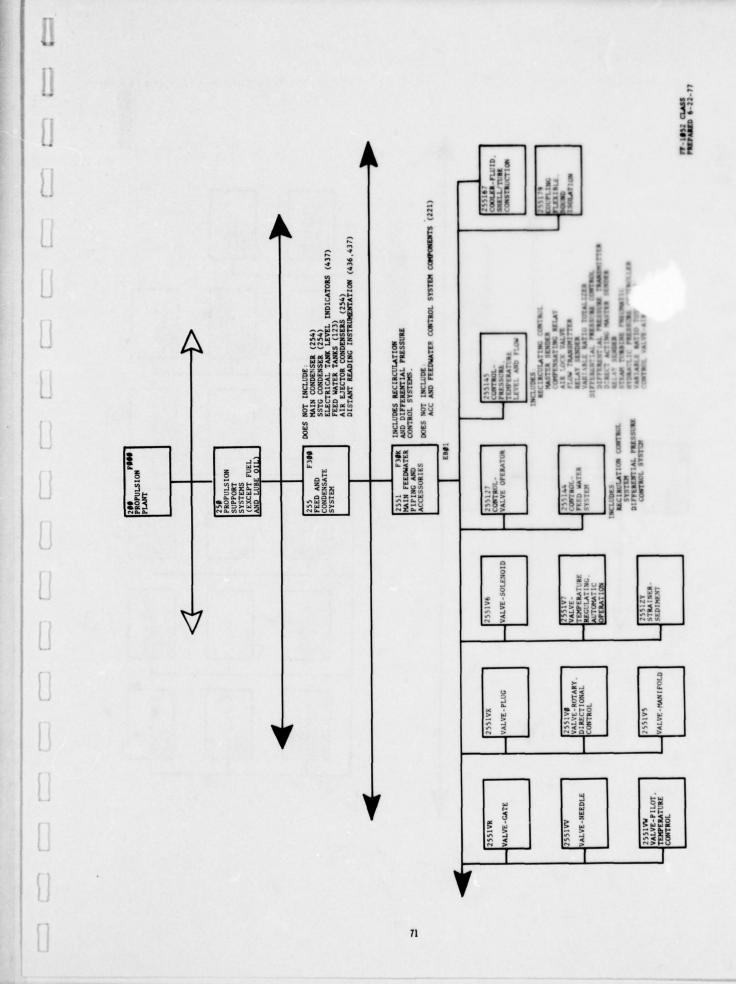


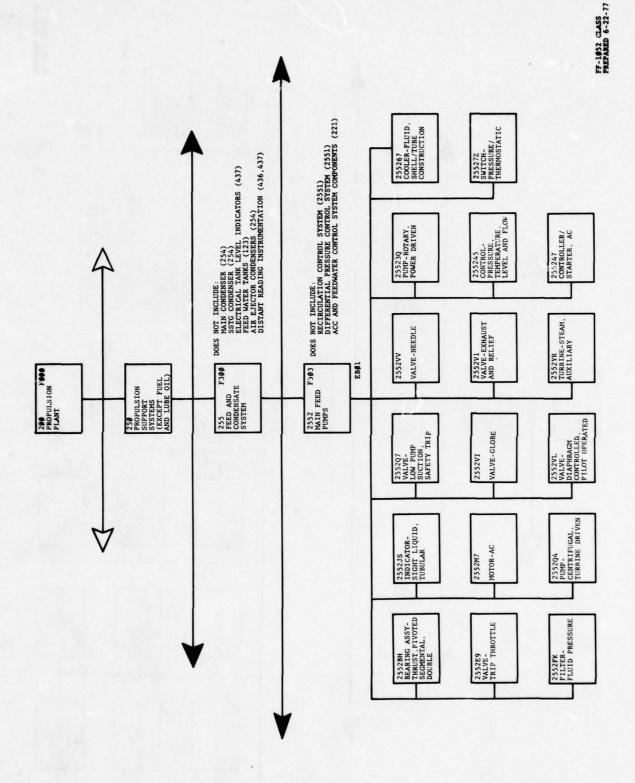
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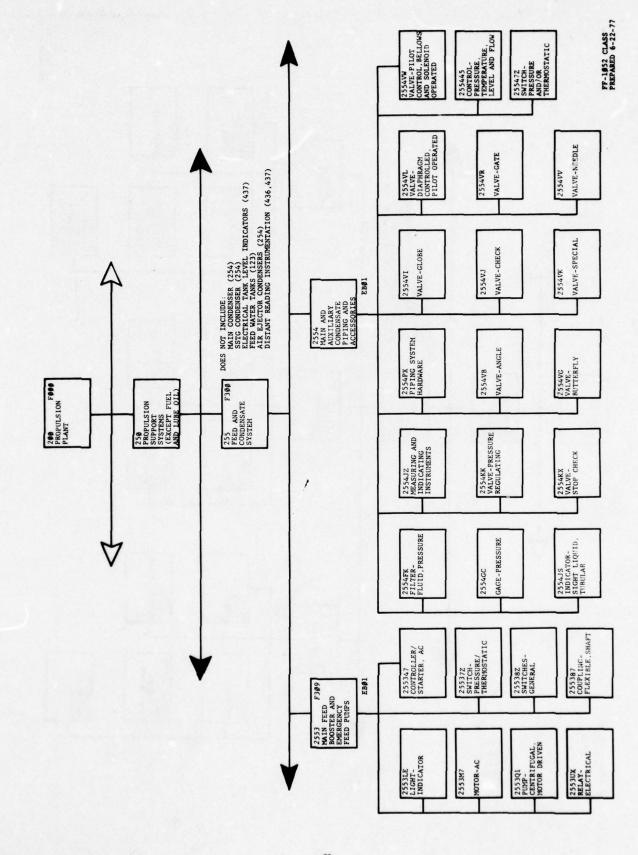


250 PROPULSION PLANT 250 PROPULSION SUPPORT. SYSTEMS 254 CONDENSERS AND AIR EJECTORS



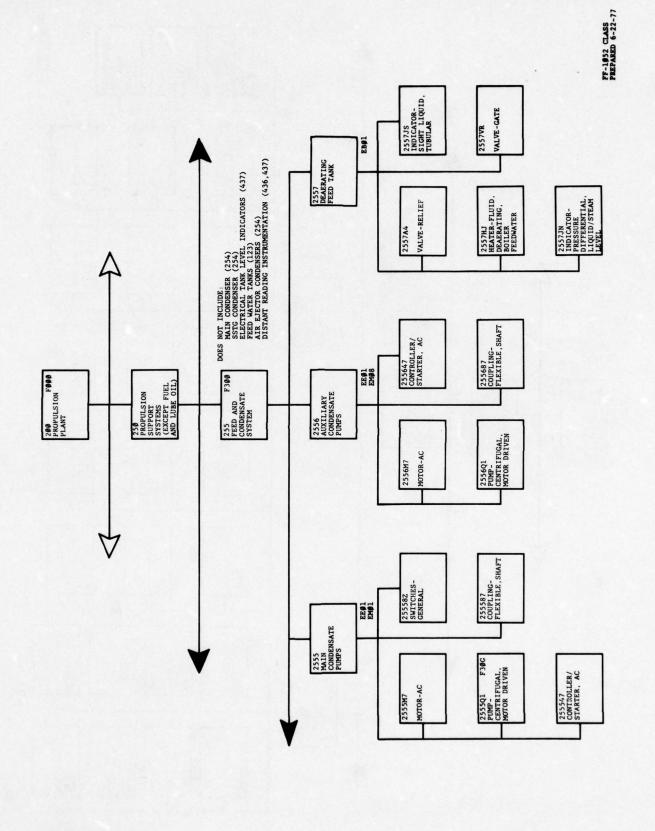


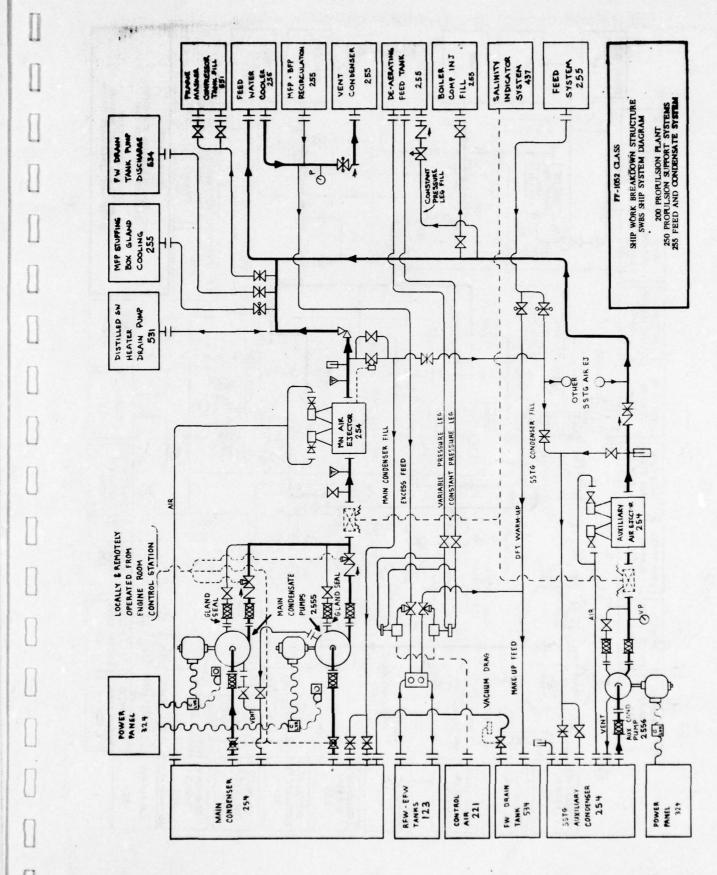


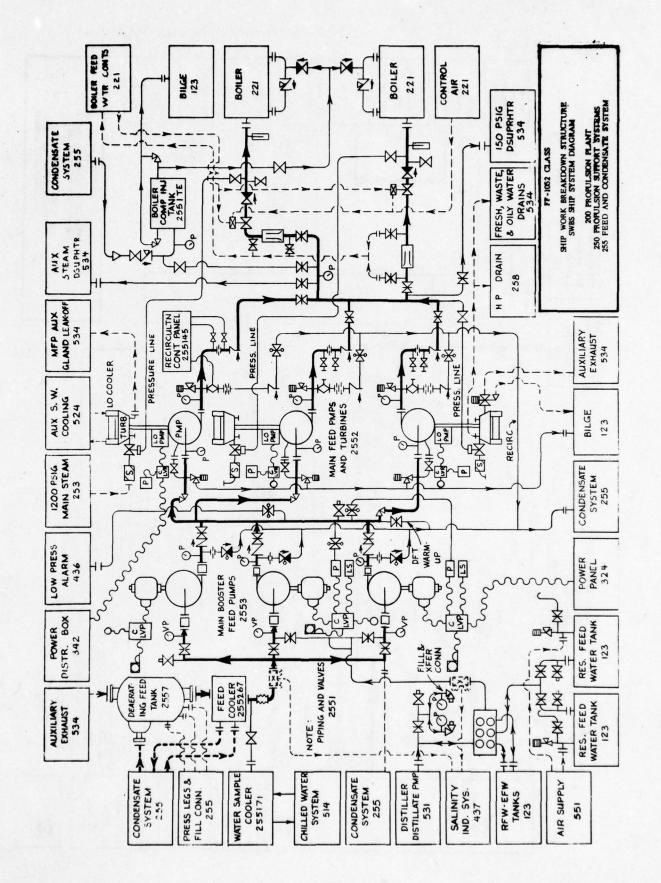


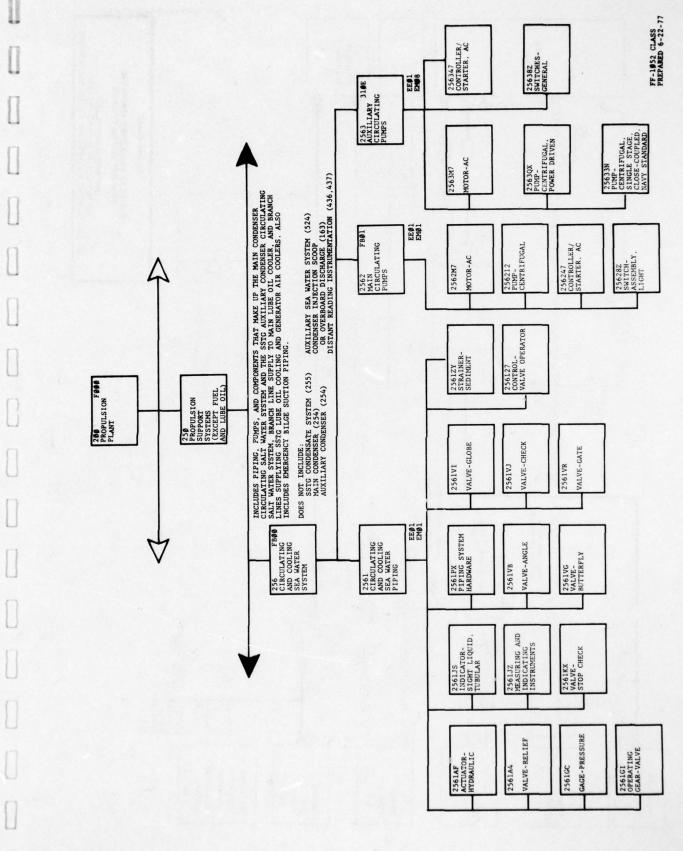
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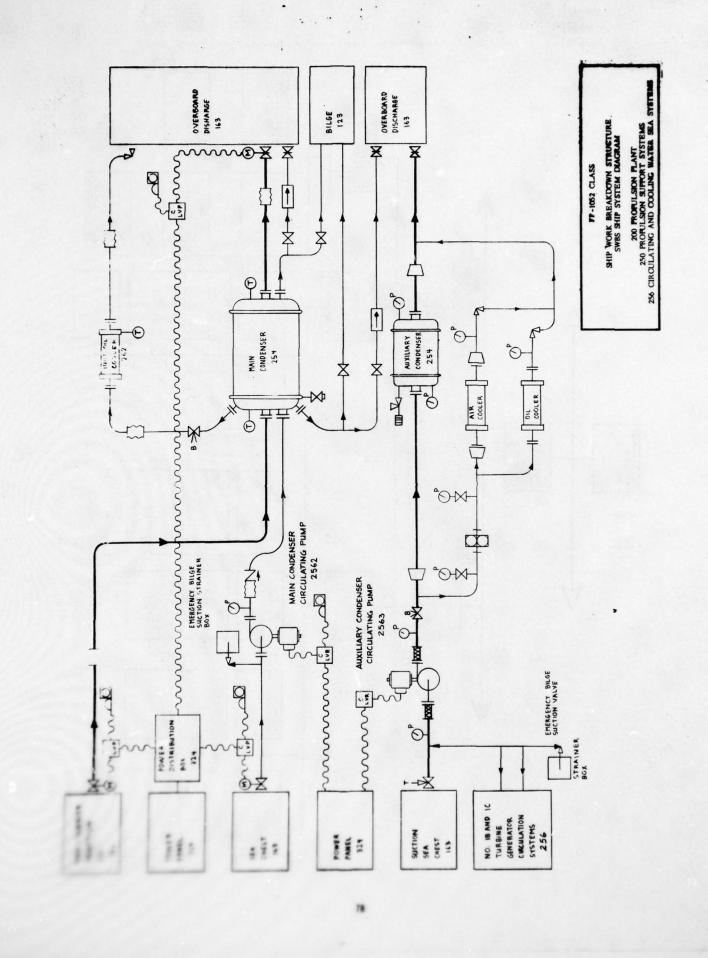
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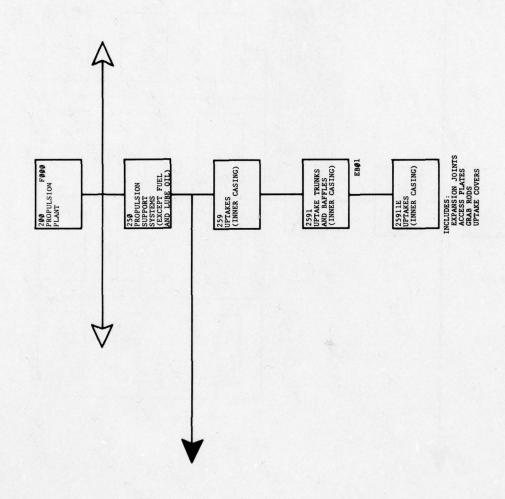








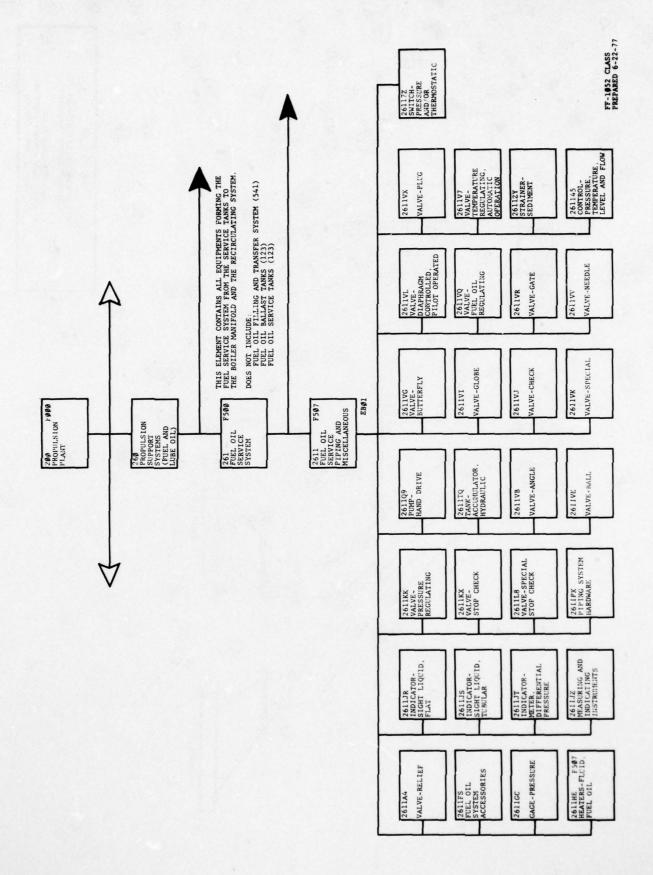
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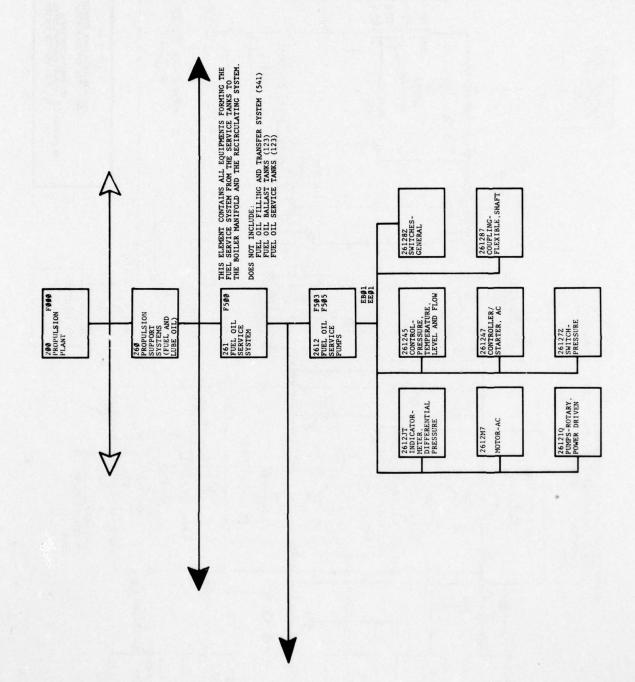


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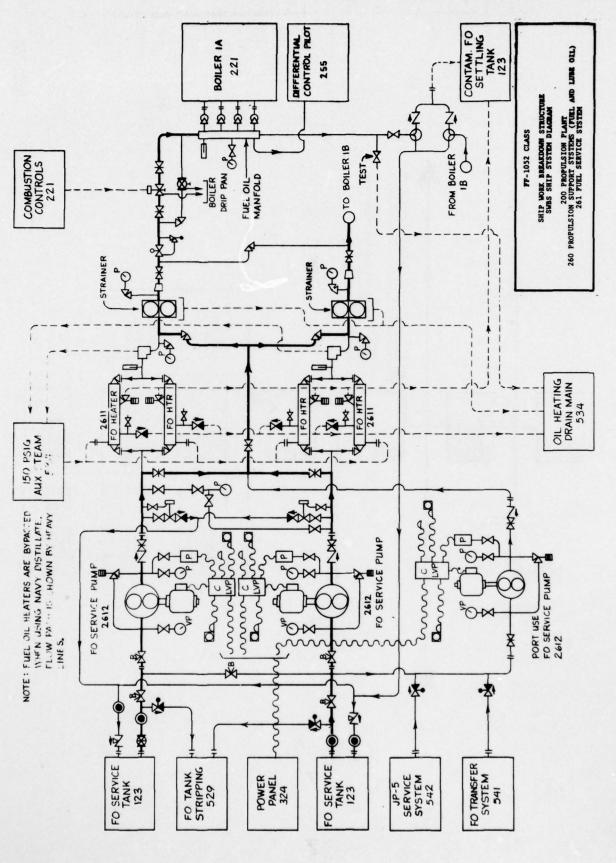
259 UPTAKES

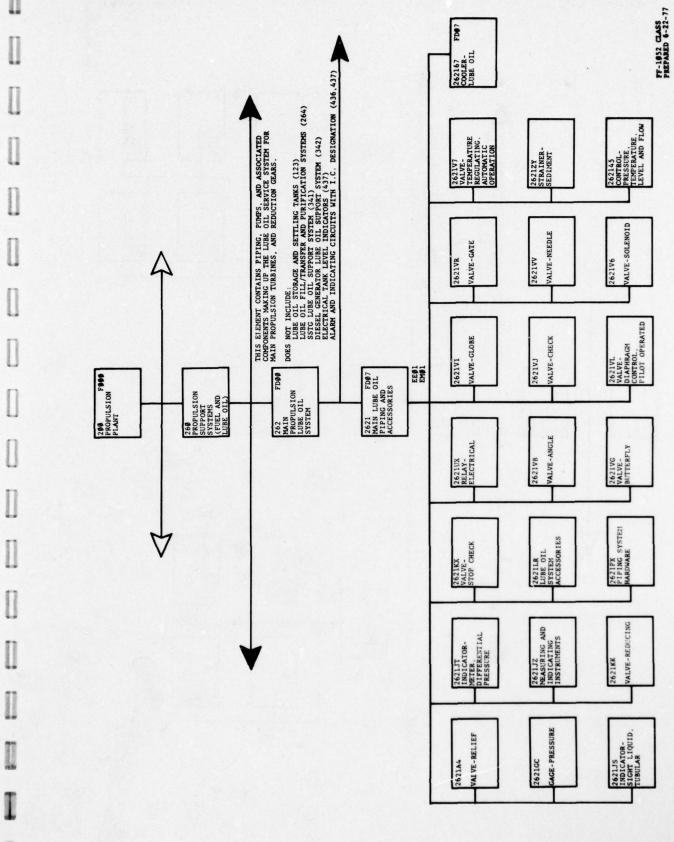
SHIP WORK BREAKDOWN STRUCTURE SWES SHIP SYSTEM DIAGRAM
200 PROPULSION PLANT
250 PROPULSION SYSTEMS
259 UPTAKES (INWER CASING)

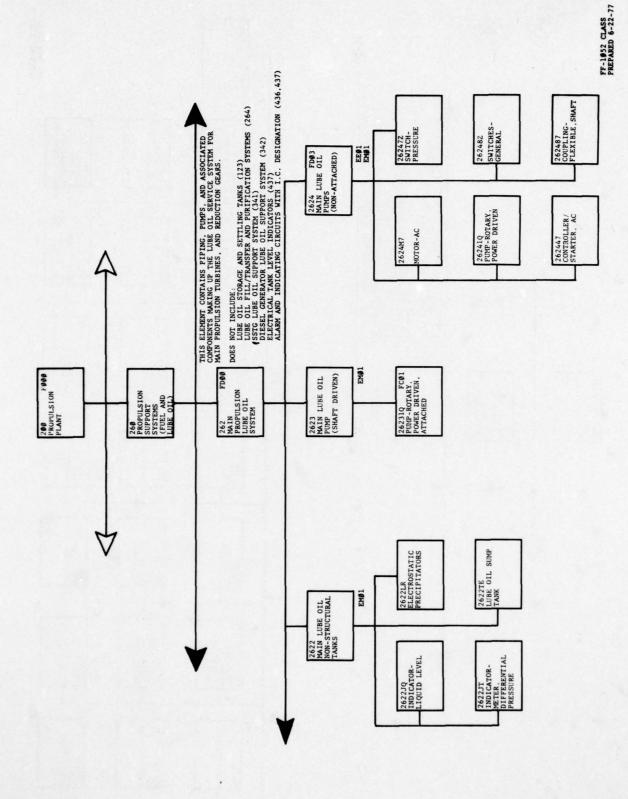


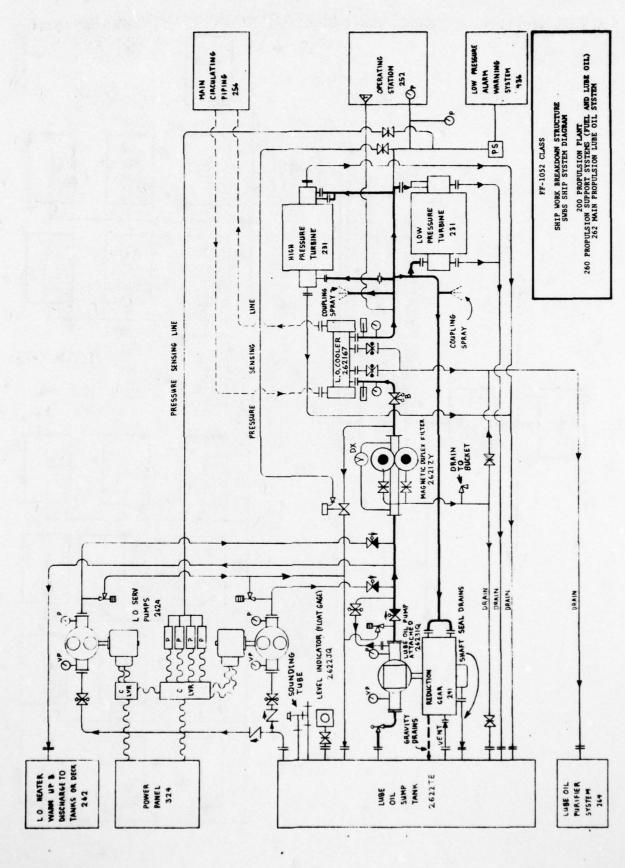


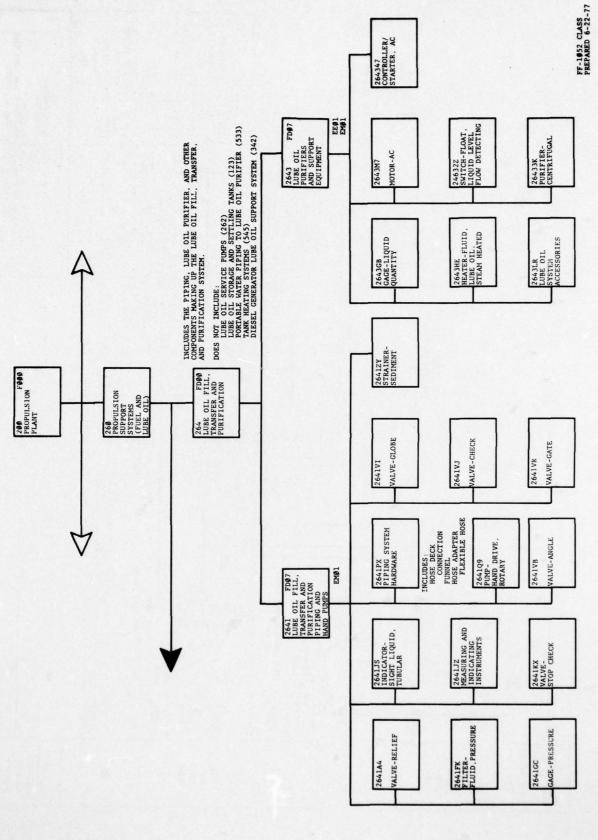
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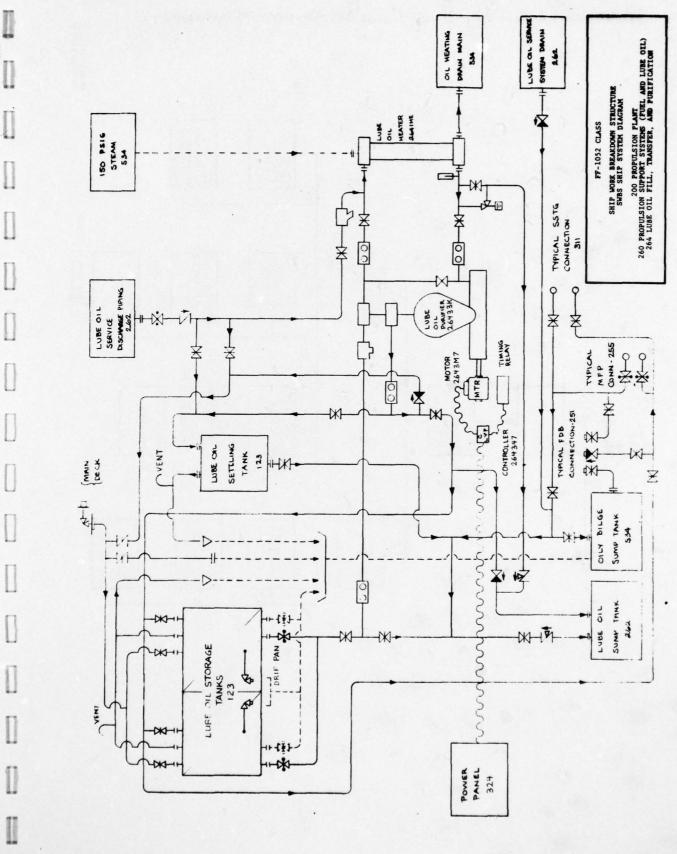


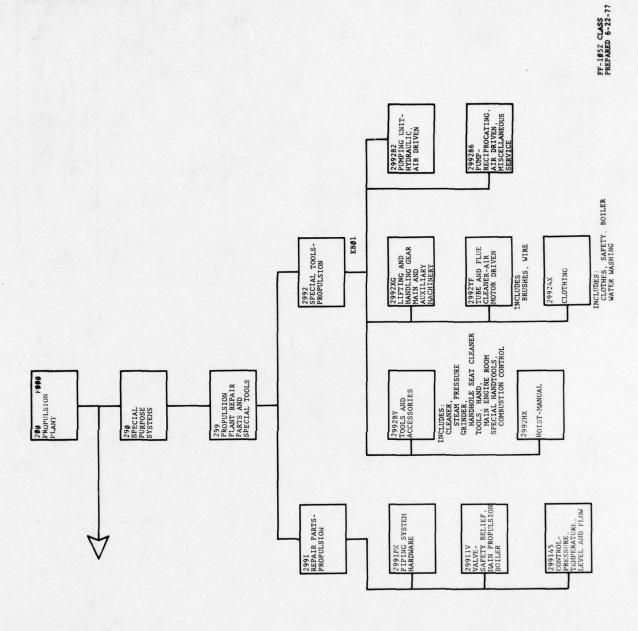


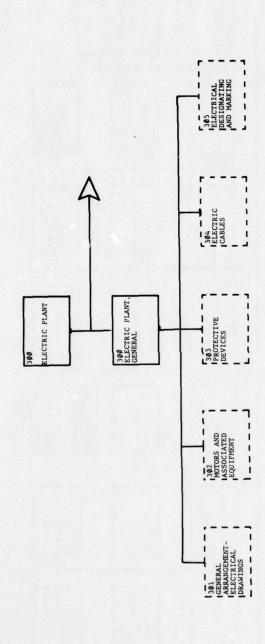








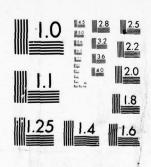




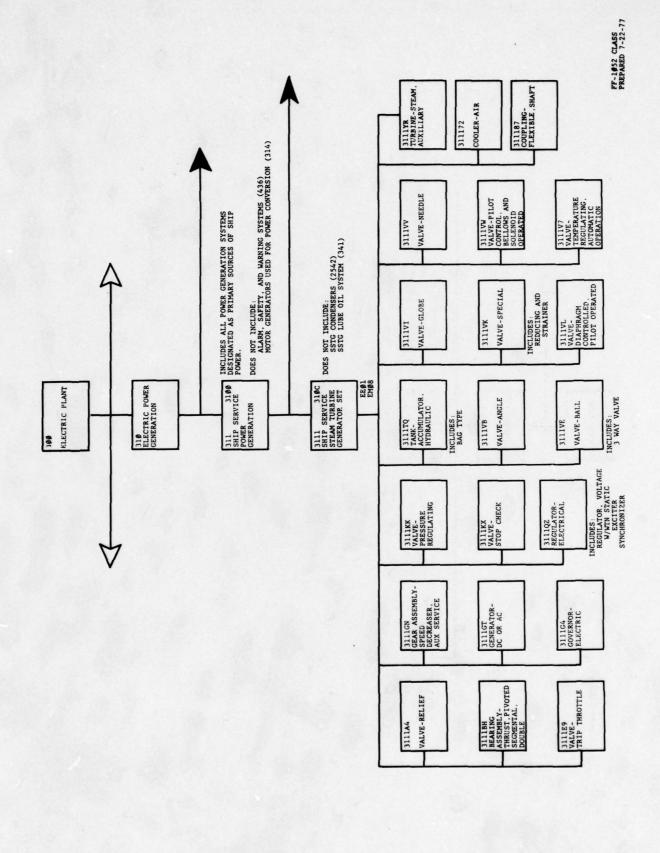
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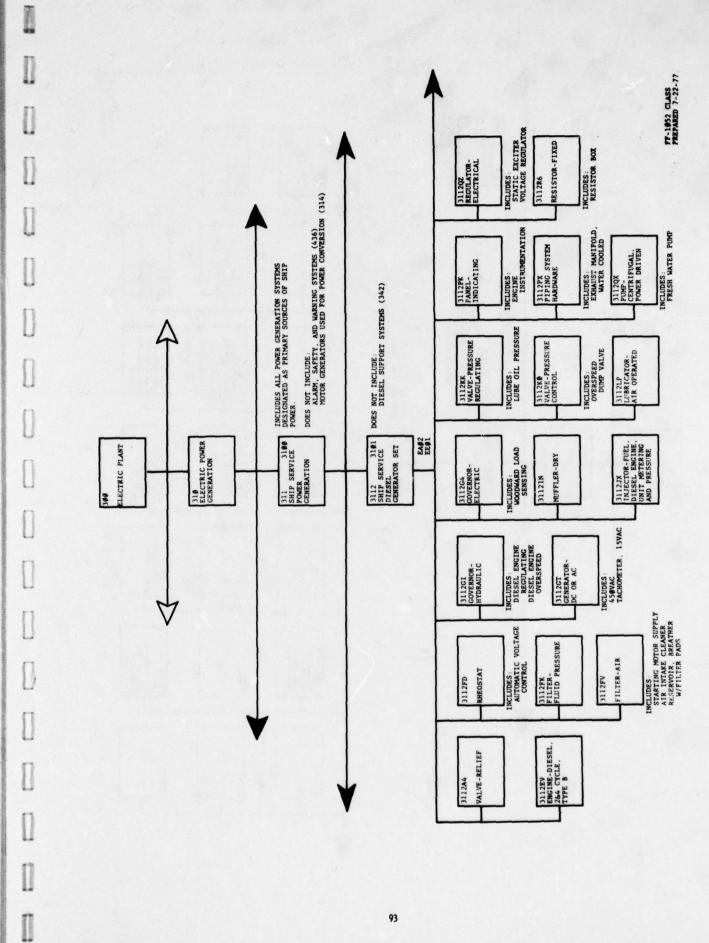
AD-A050 439	ARINC RESEARCH CORP ANNAPOLIS MD SHIP SYSTEMS DEFINITION AND INDEX (SWBS STAGING DIAGRAMS) FOR F-ETC(U) OCT 76 1804-01-1-1547R NL											
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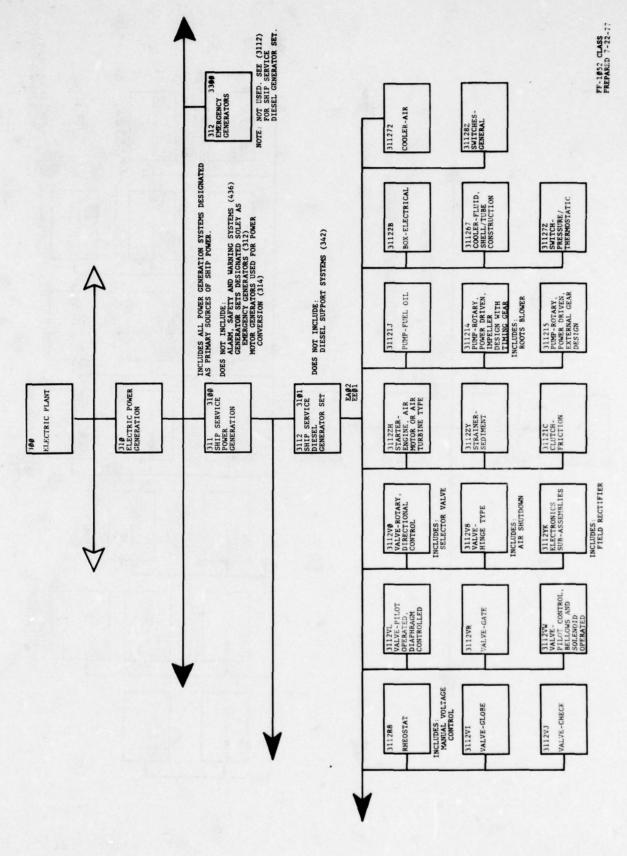
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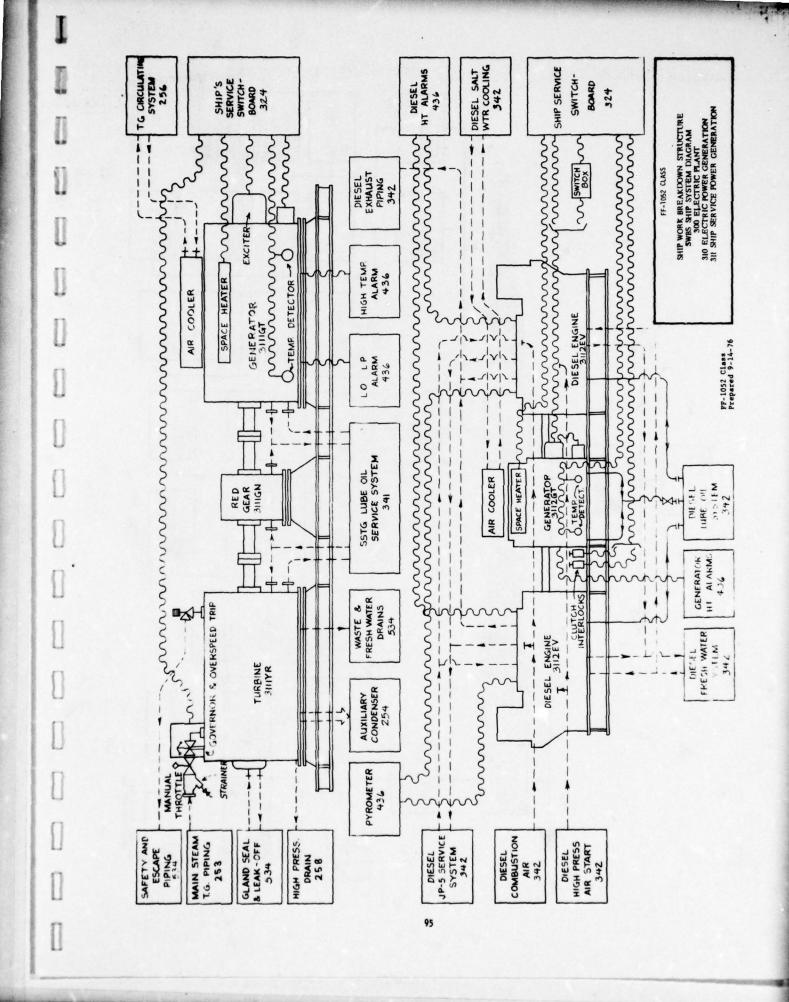


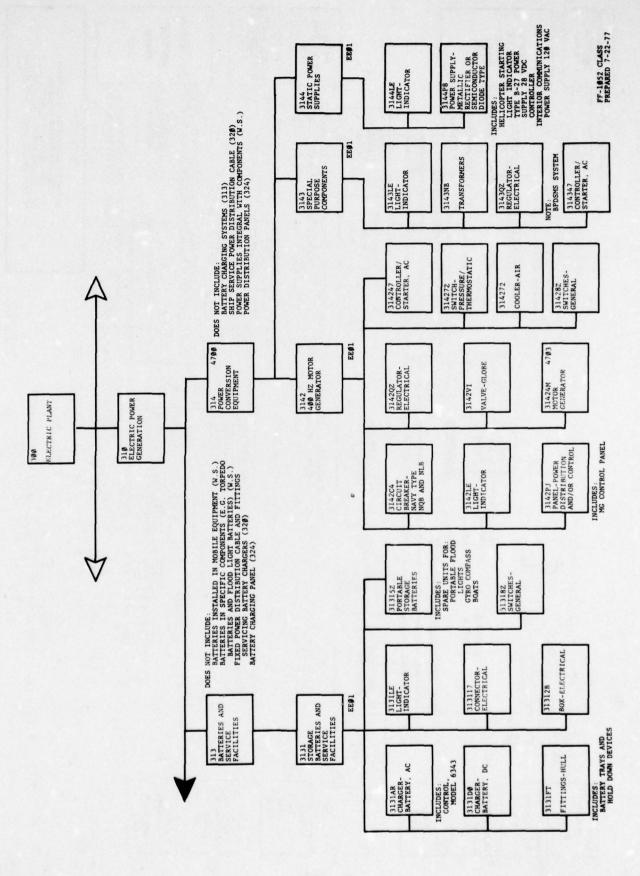
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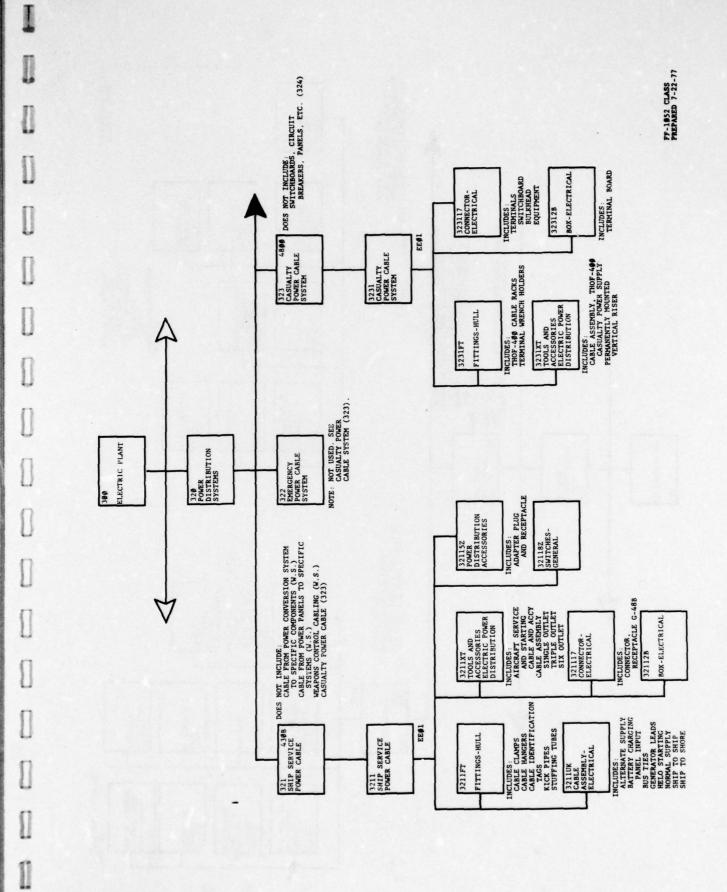


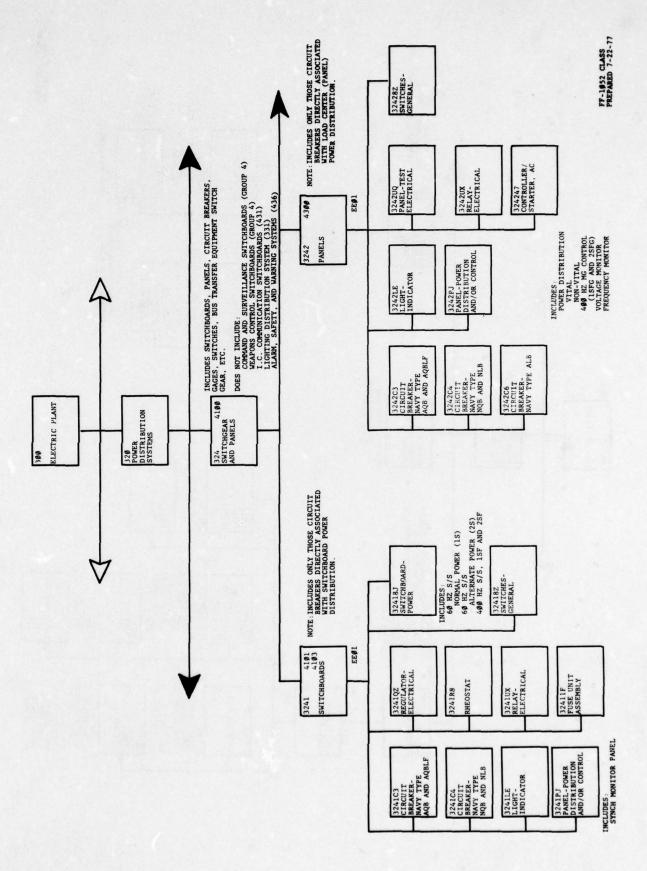


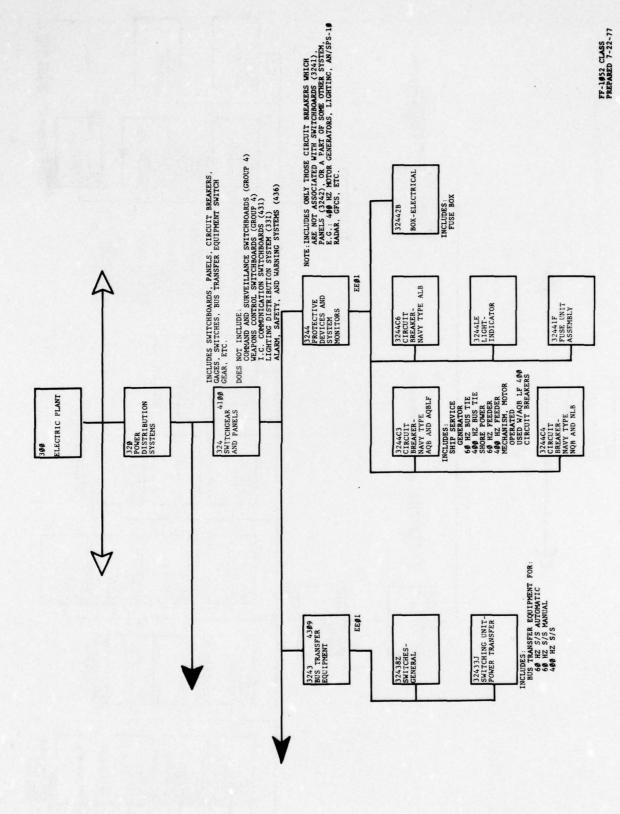


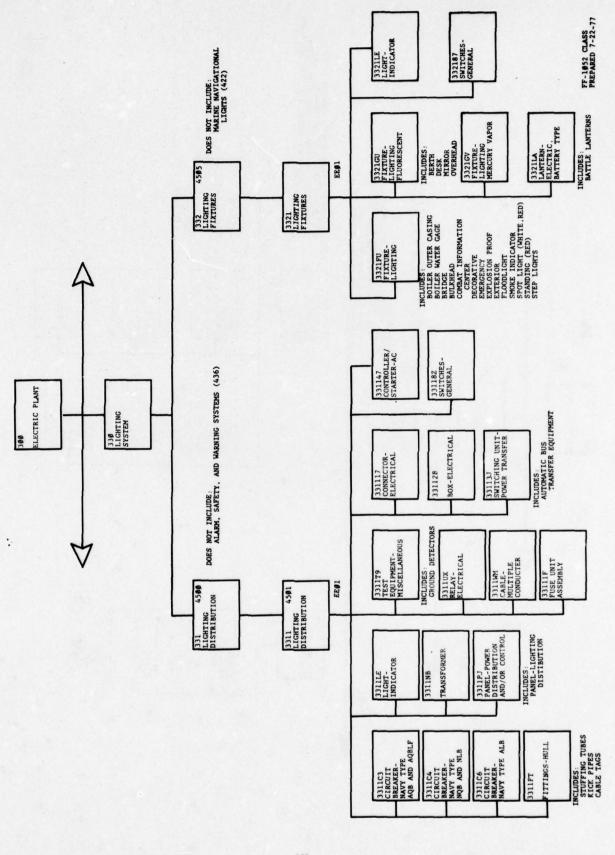


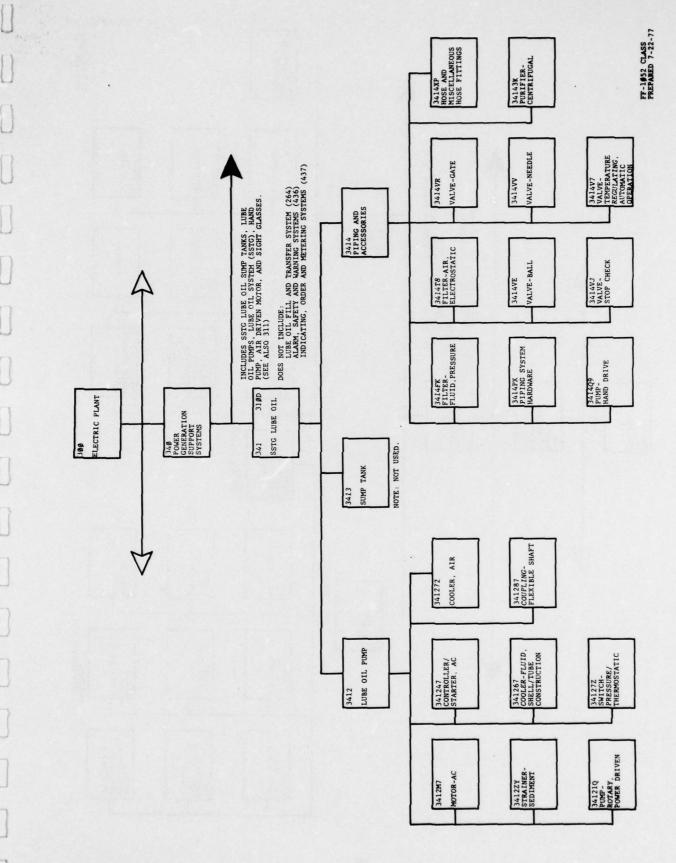


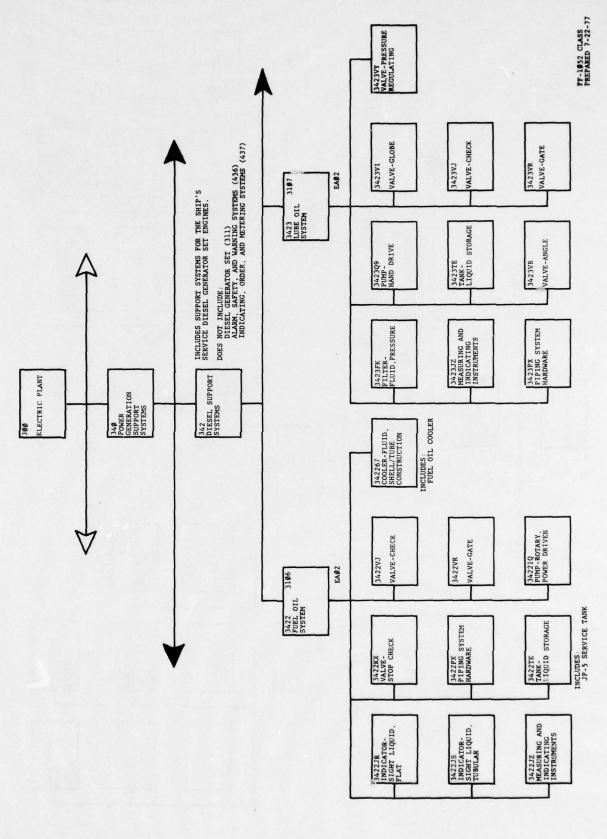


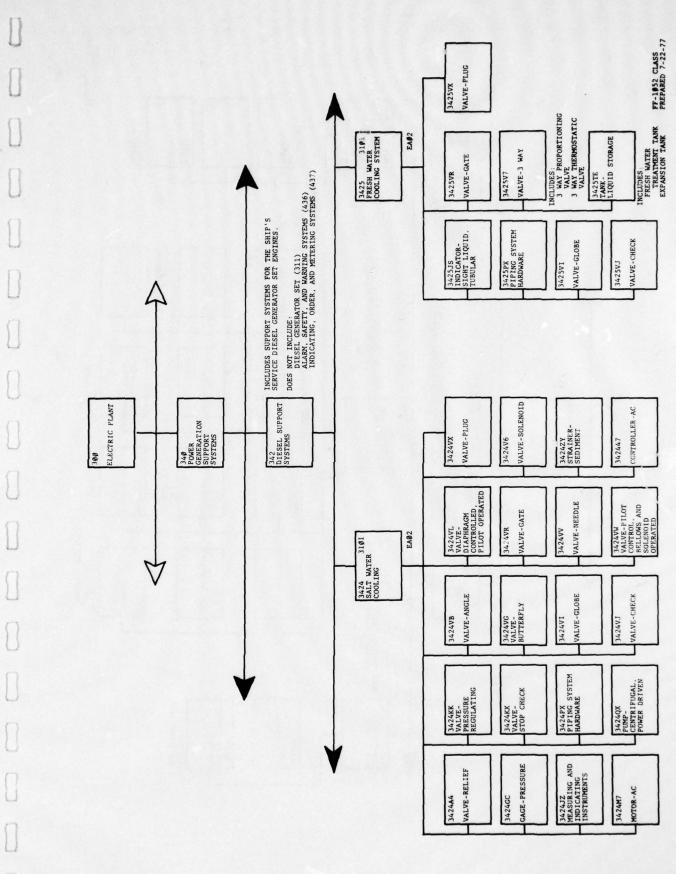


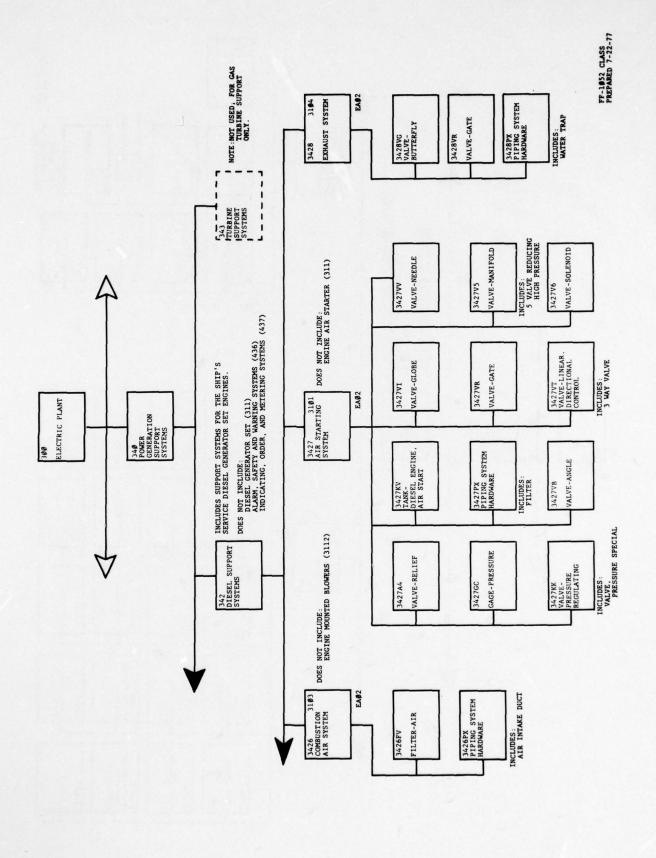


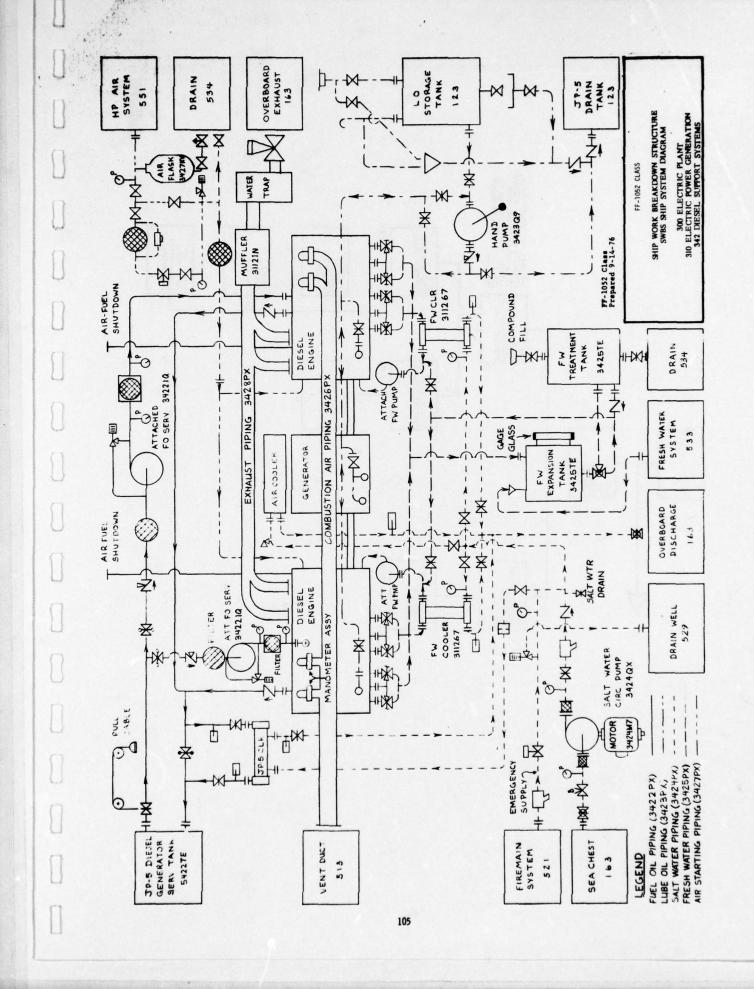


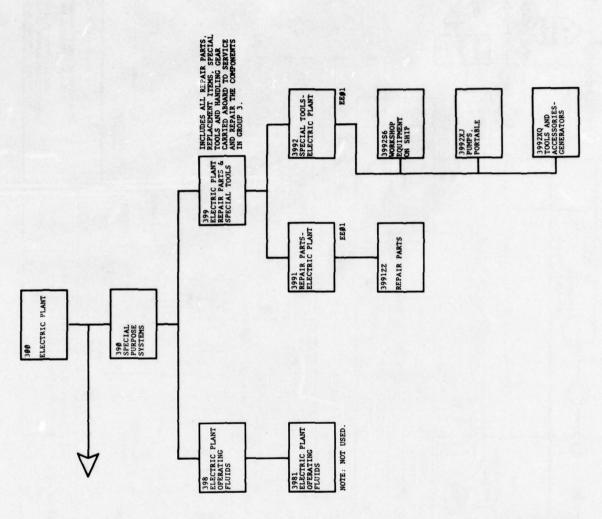


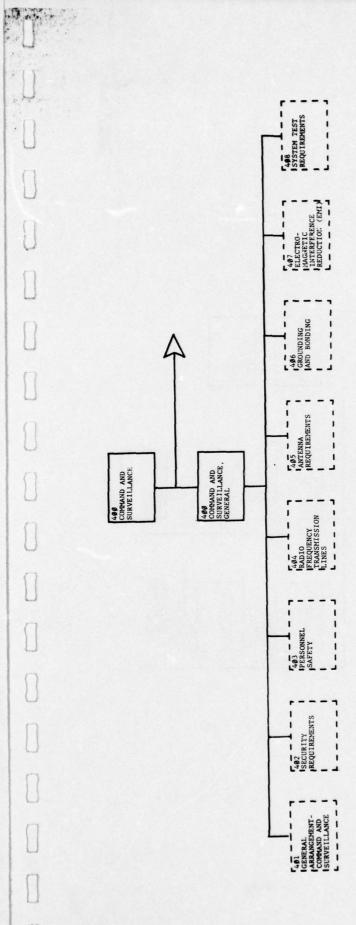


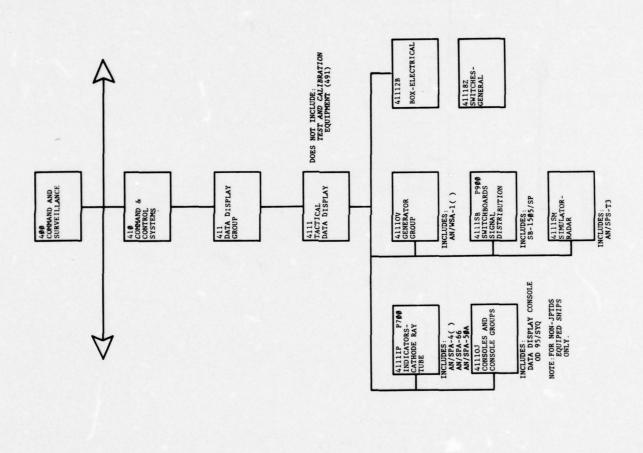


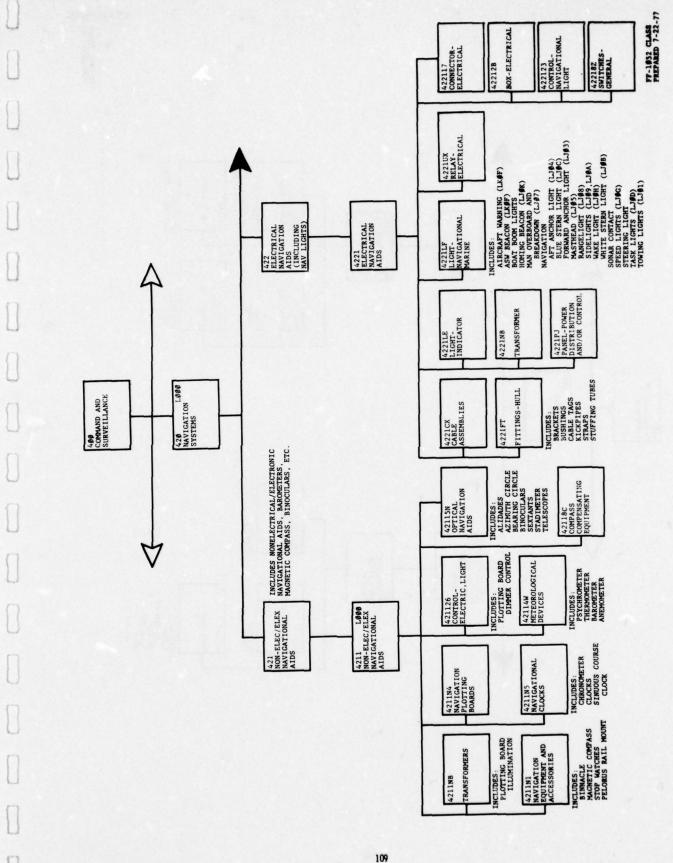




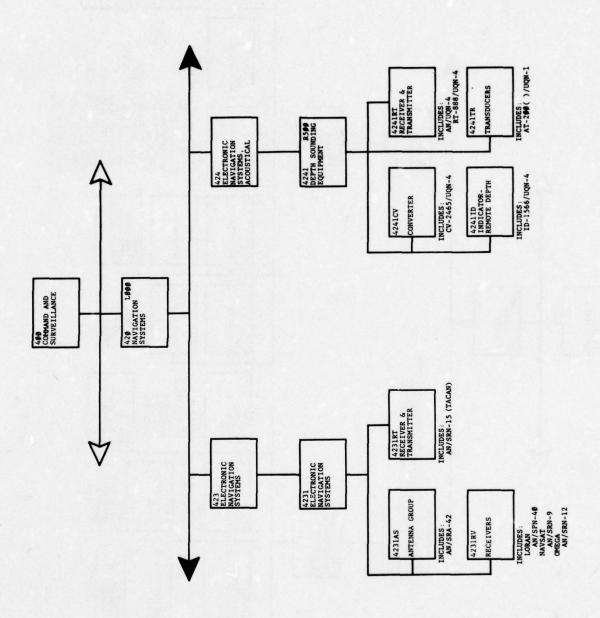


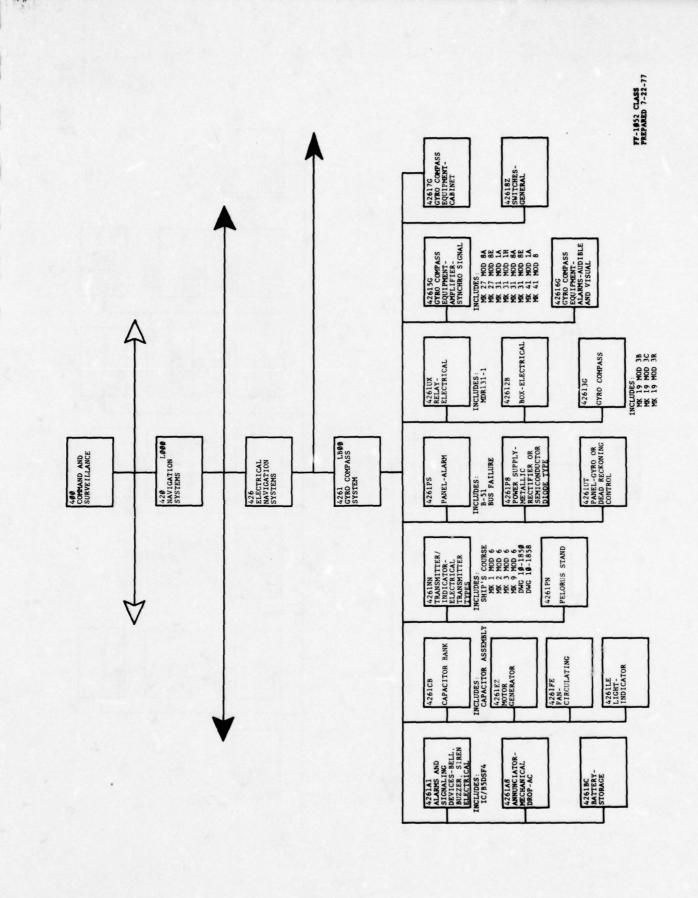


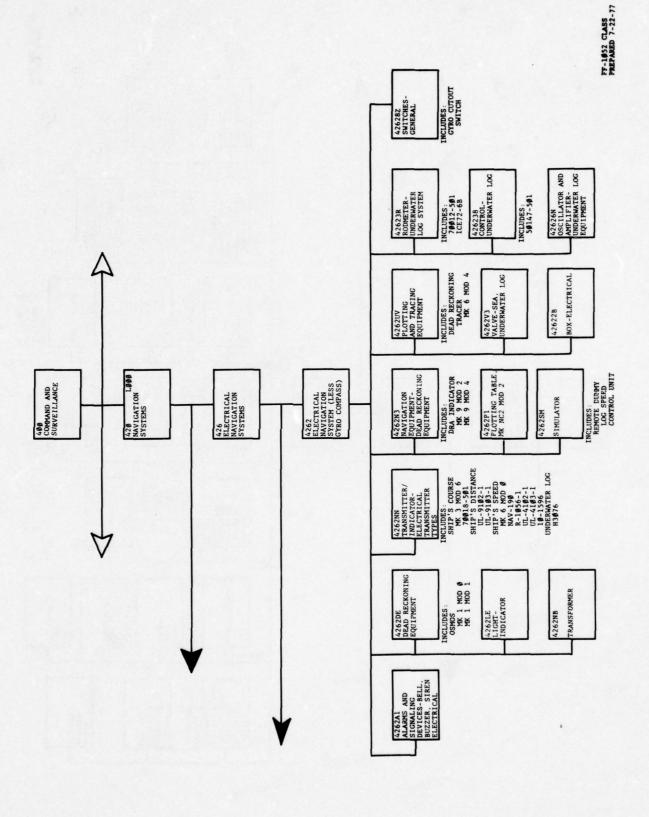


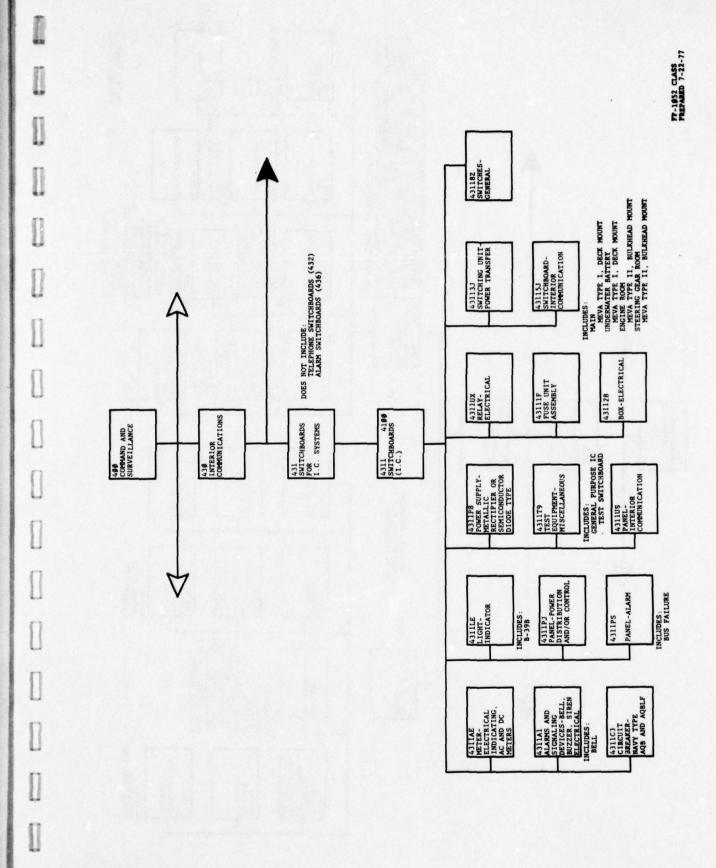


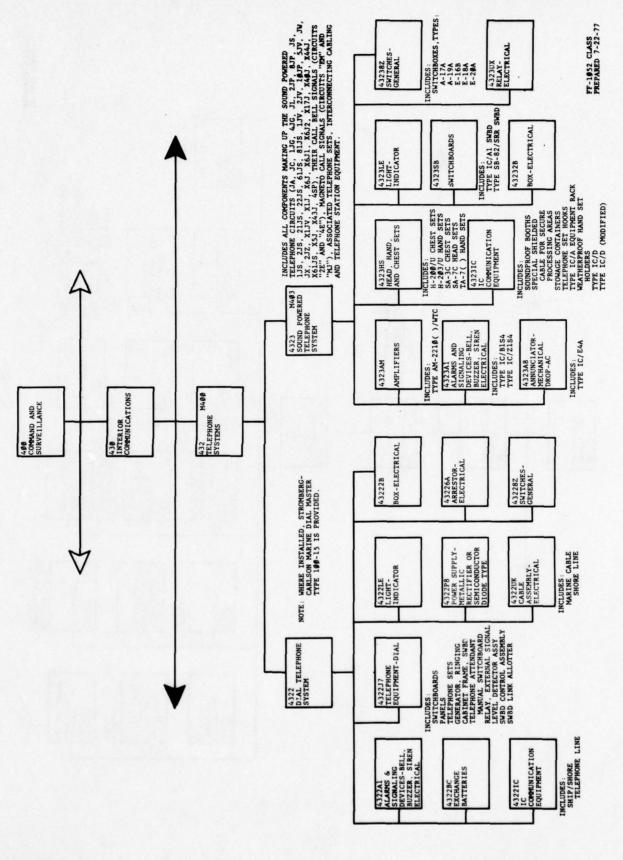
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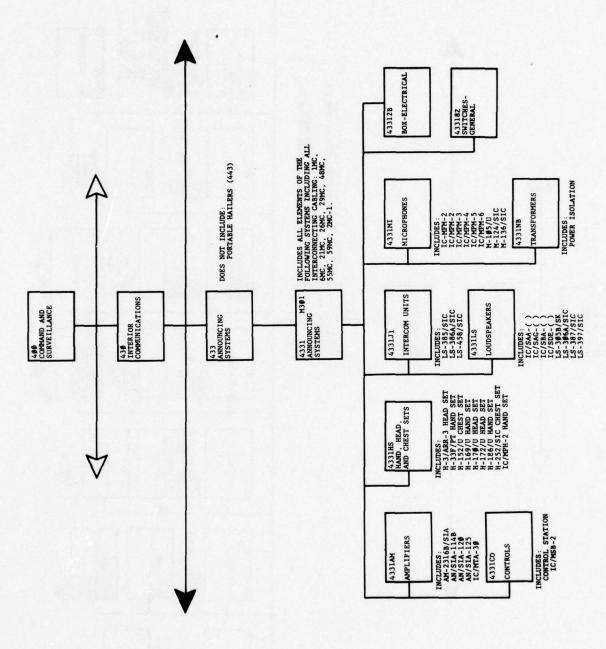


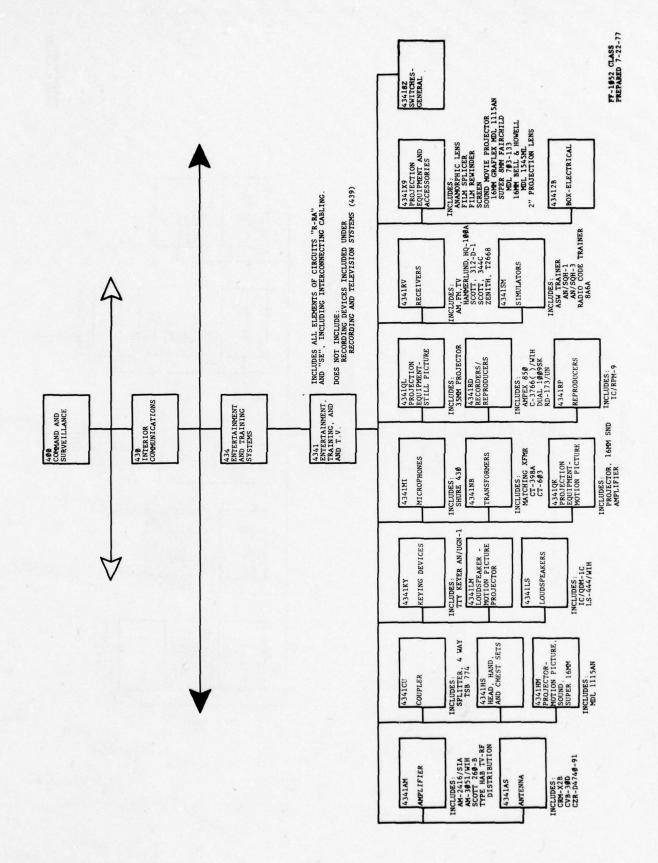


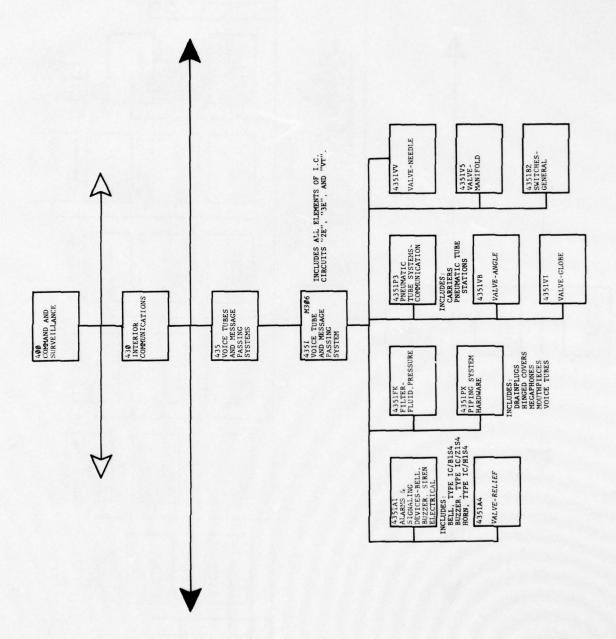


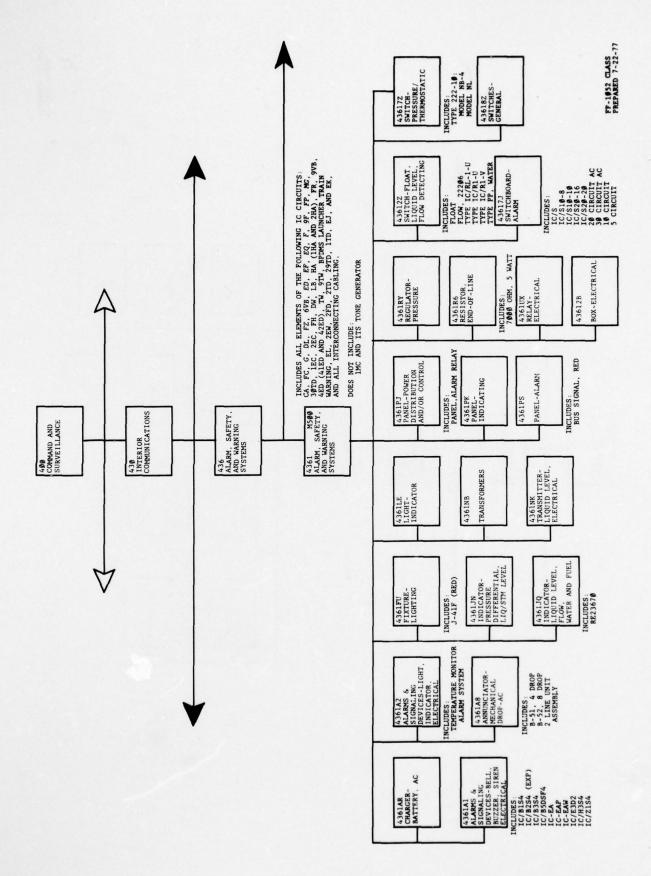


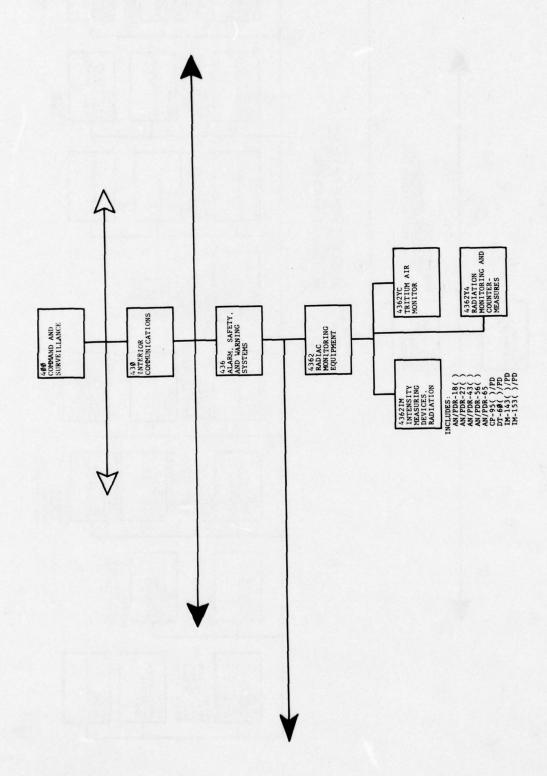


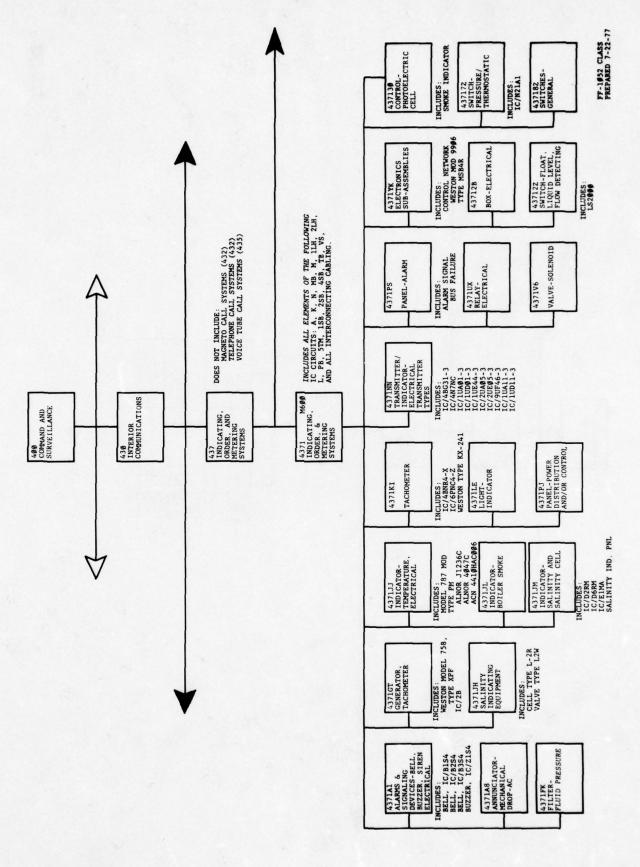


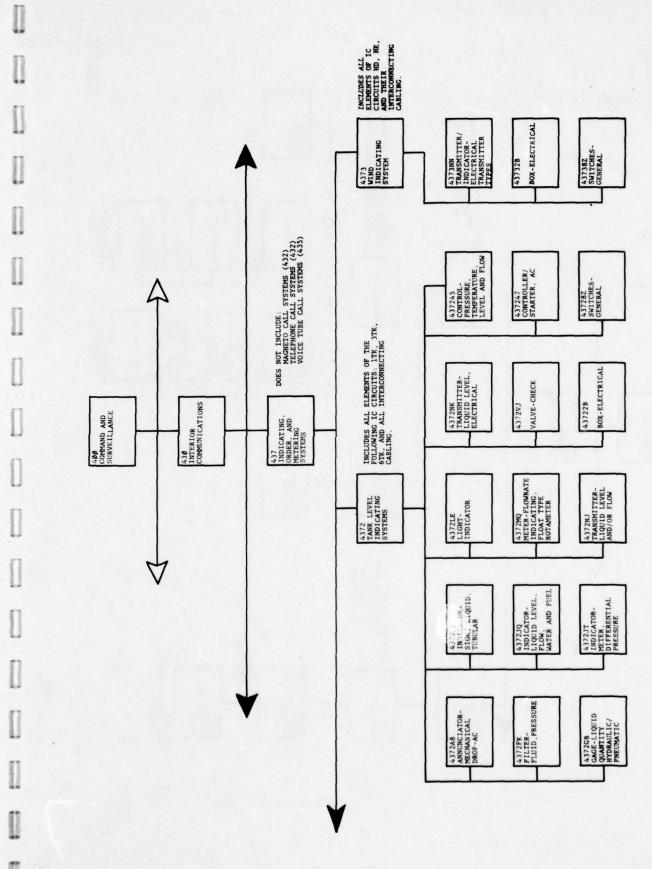




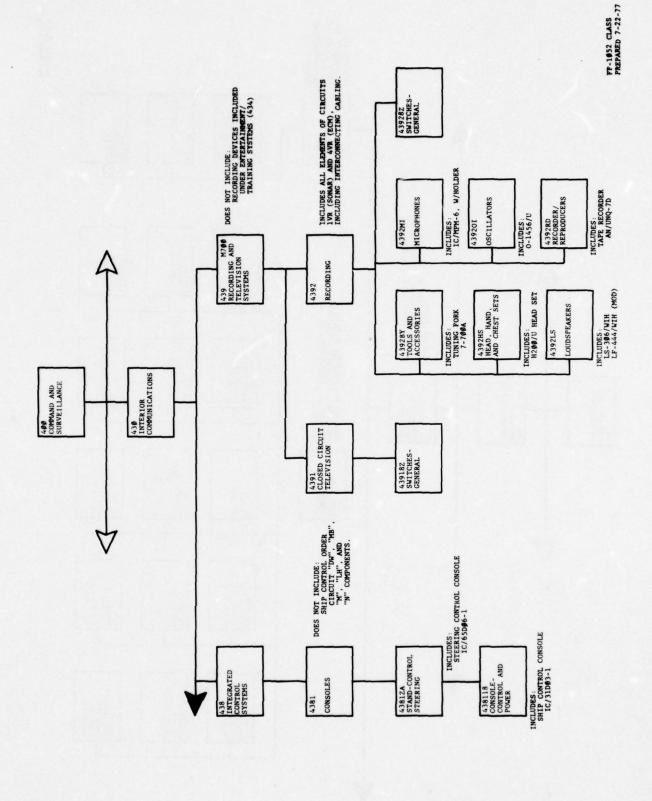


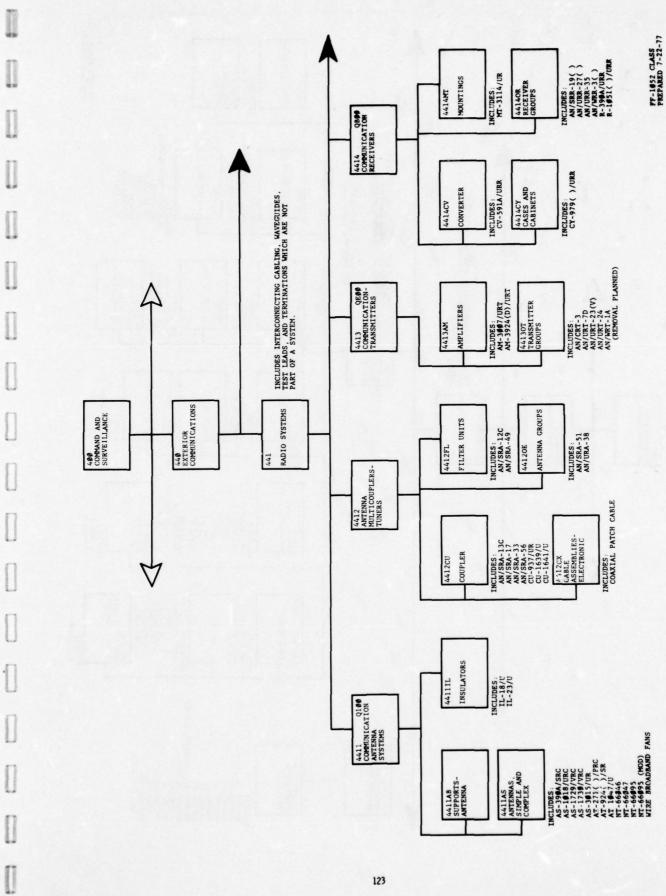


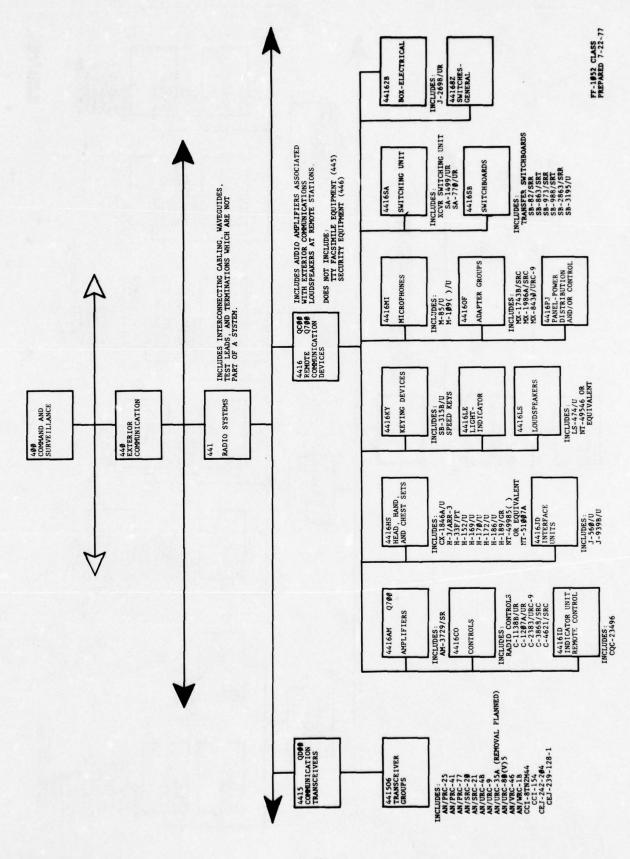


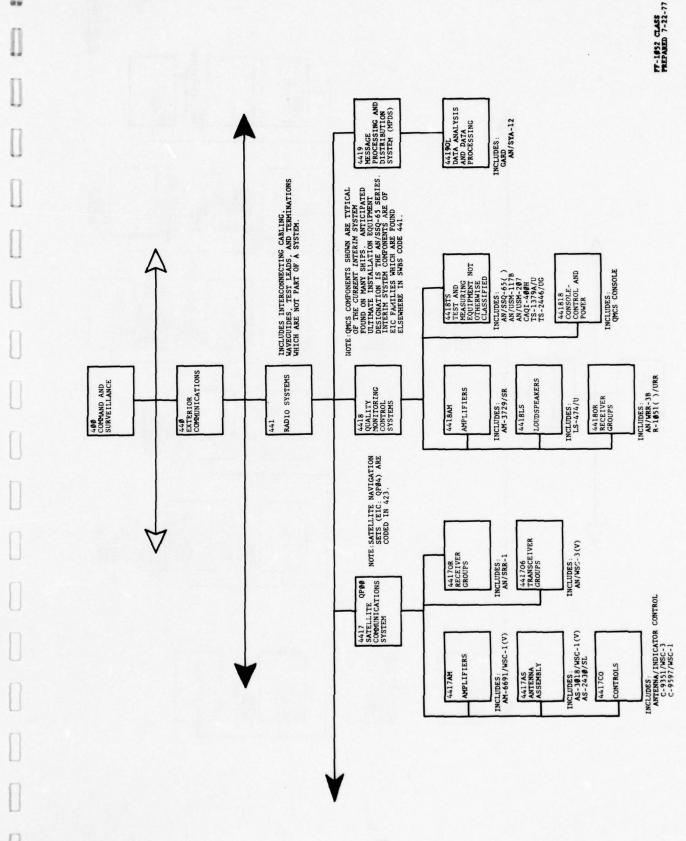


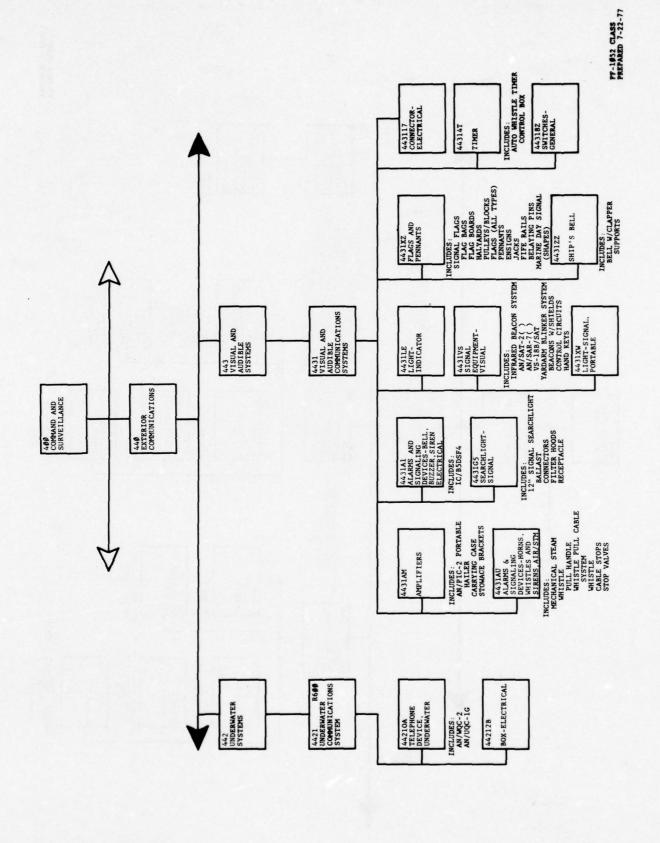
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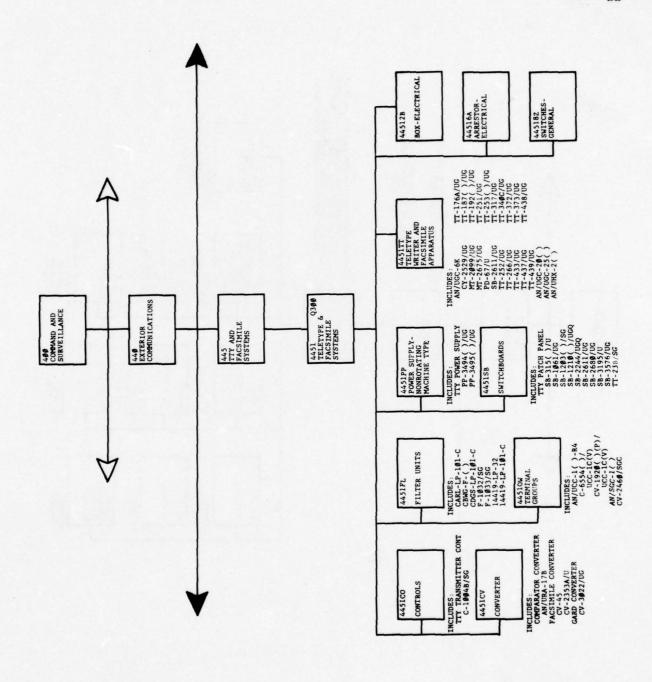




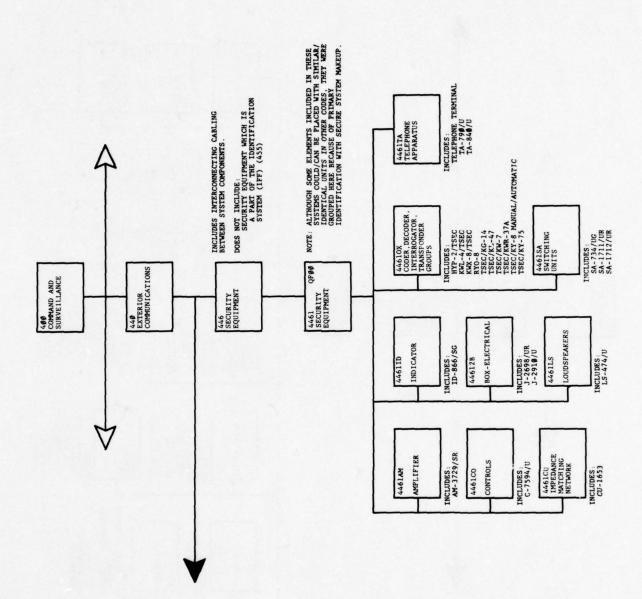




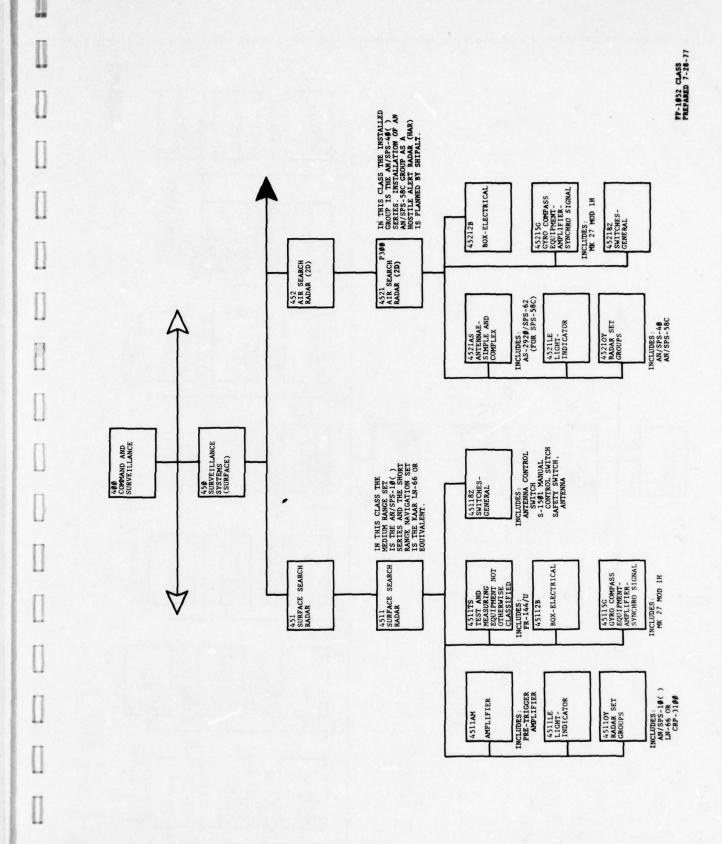


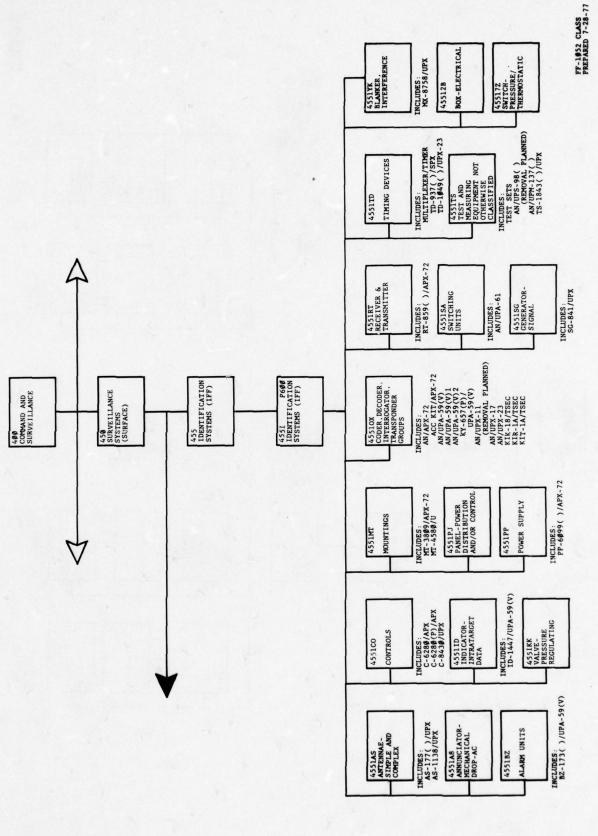


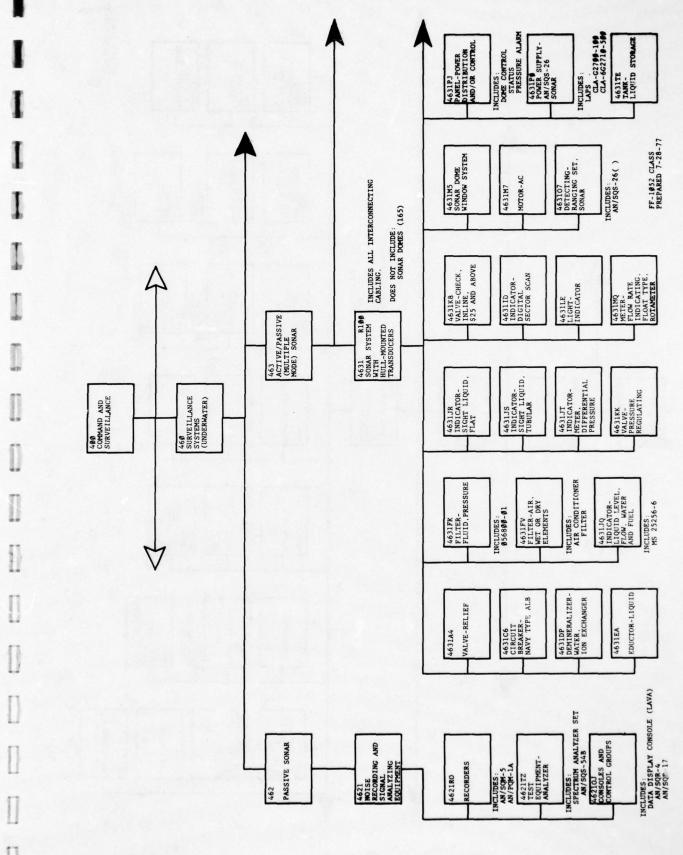
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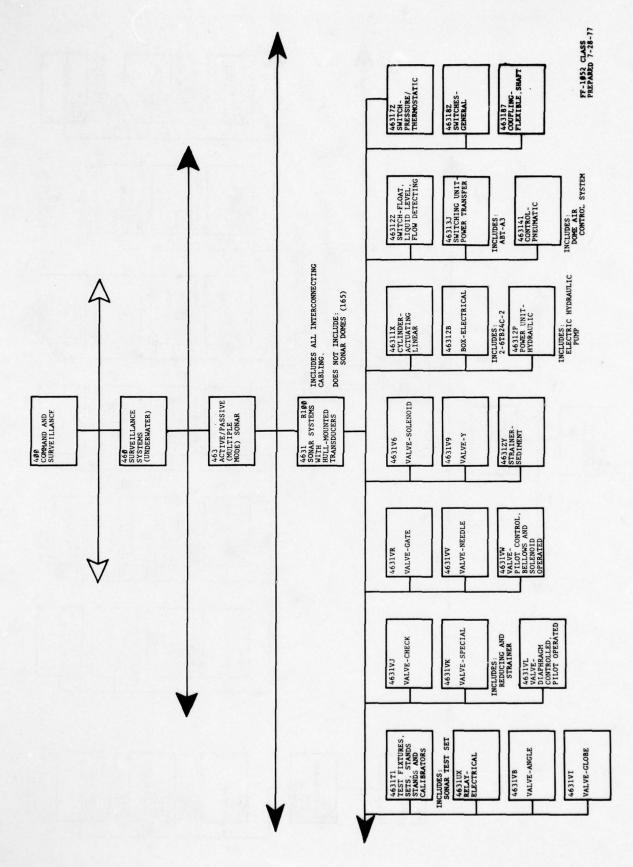


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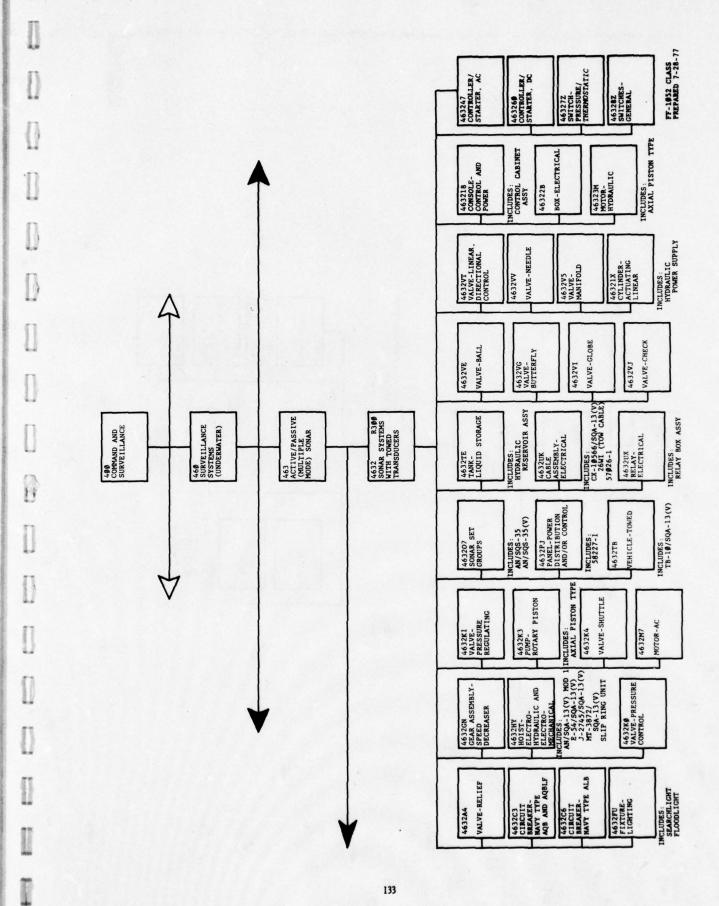


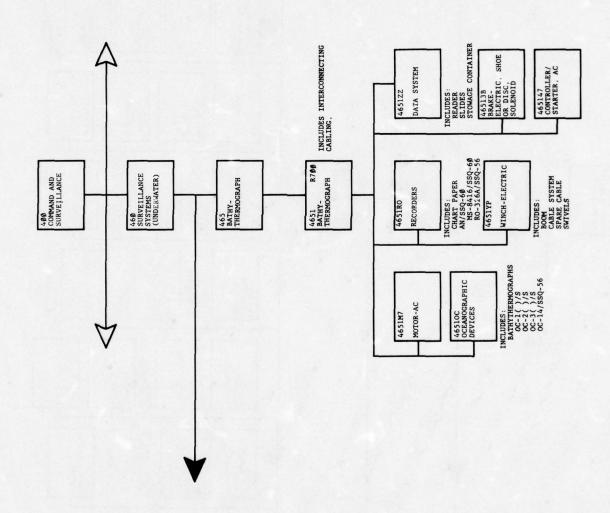


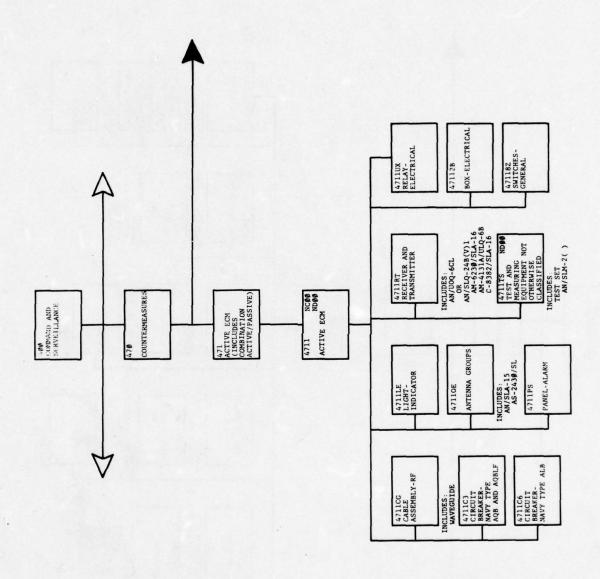




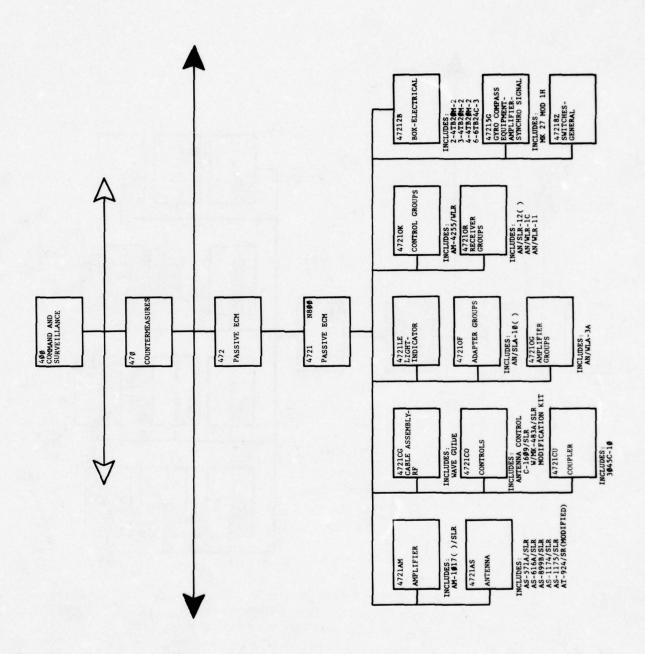
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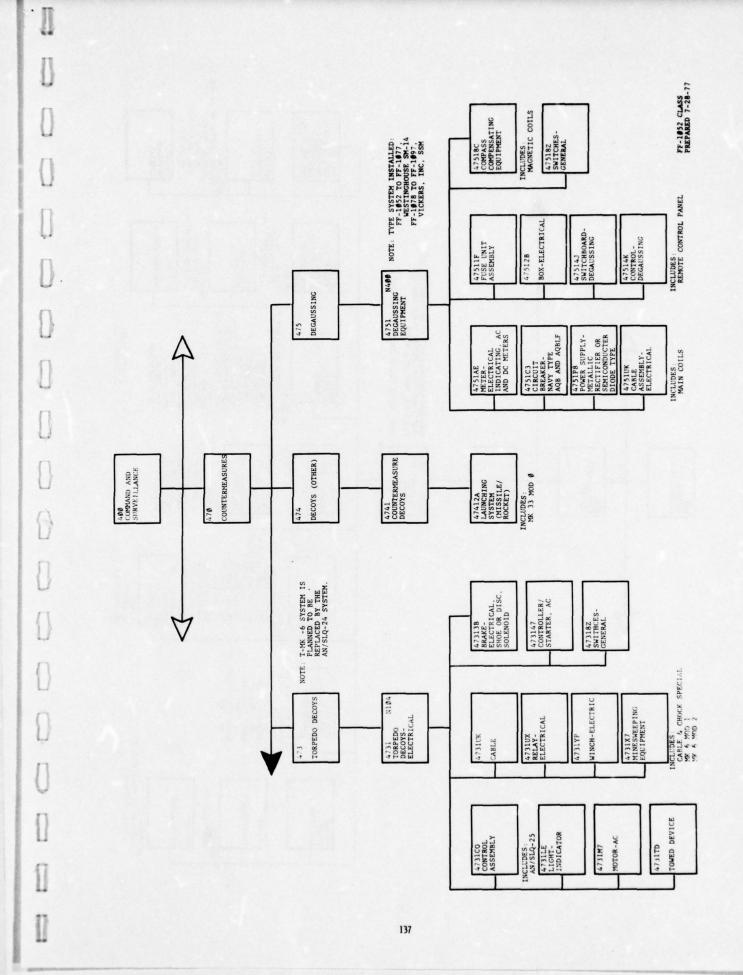


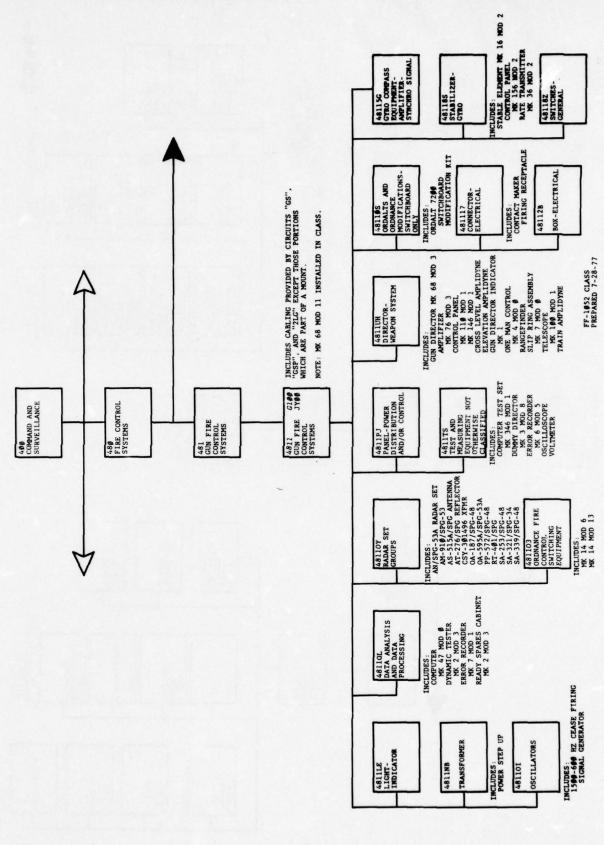


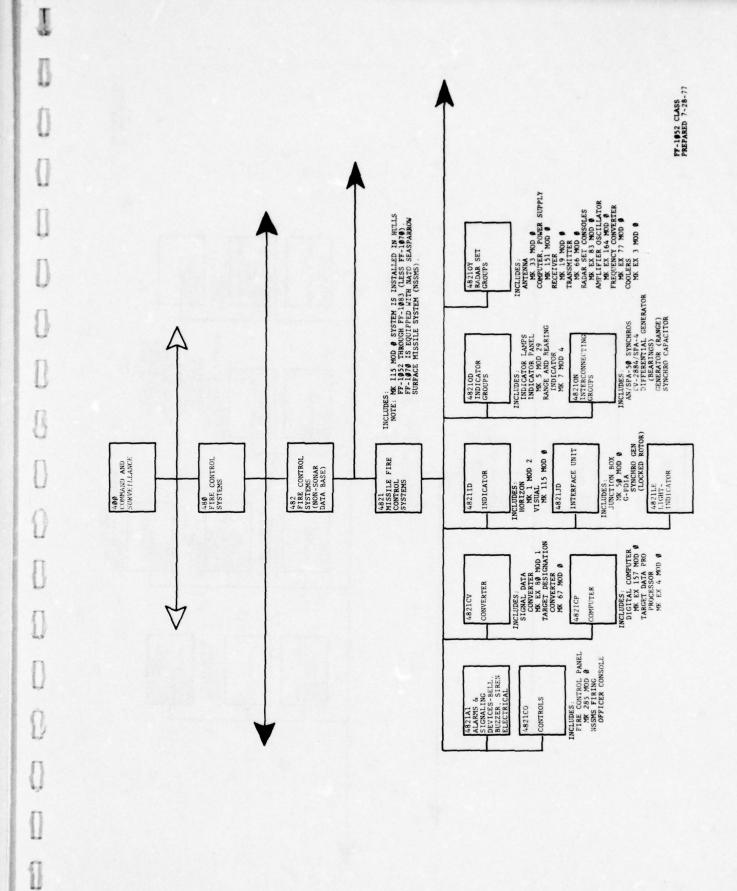


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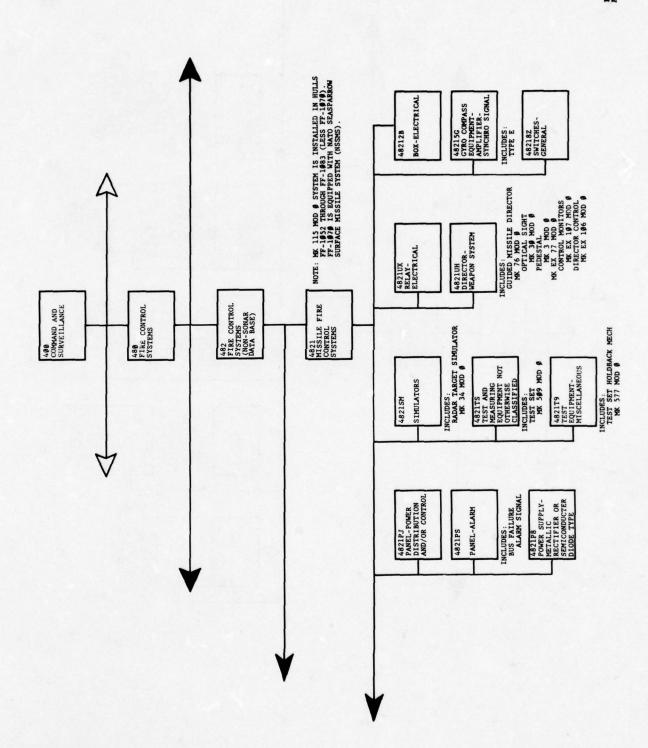


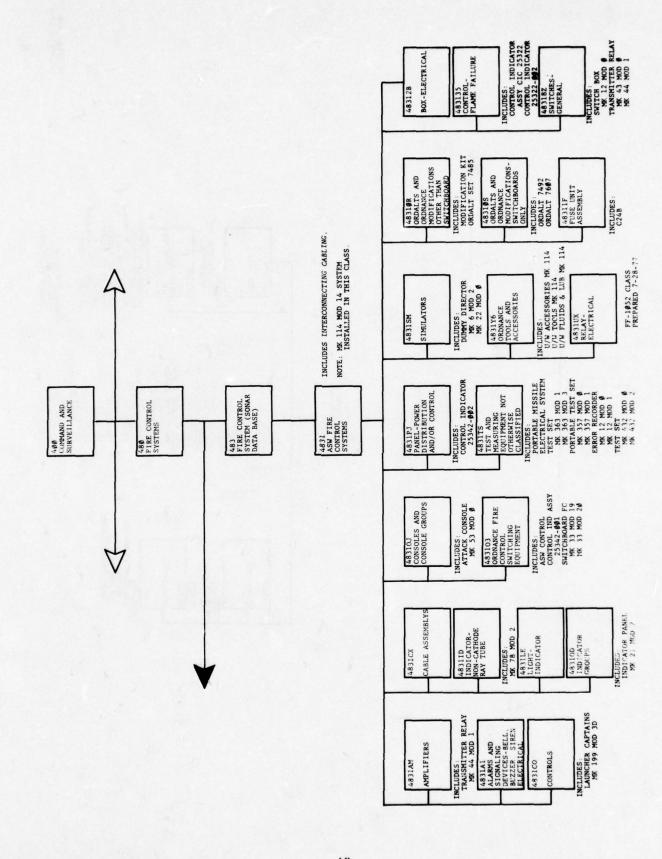






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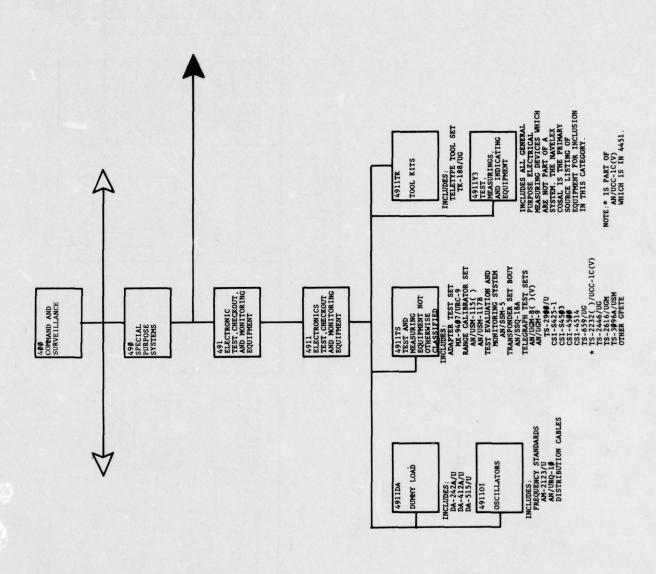
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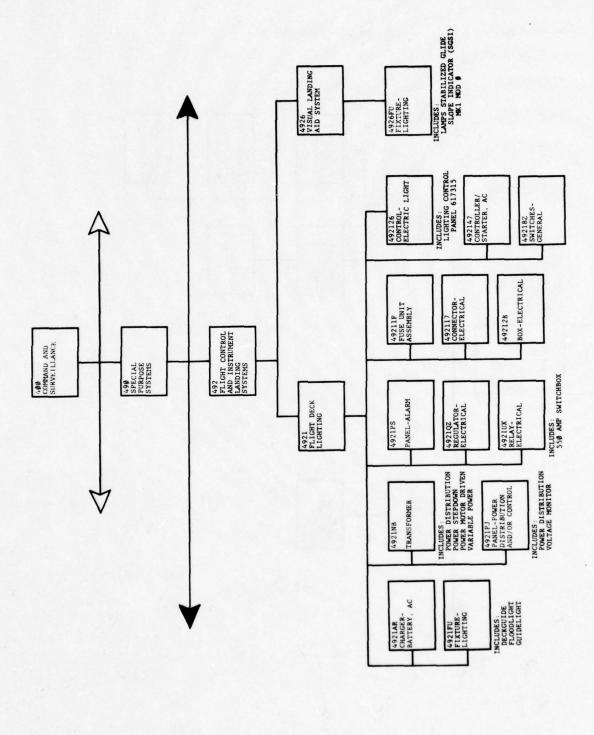
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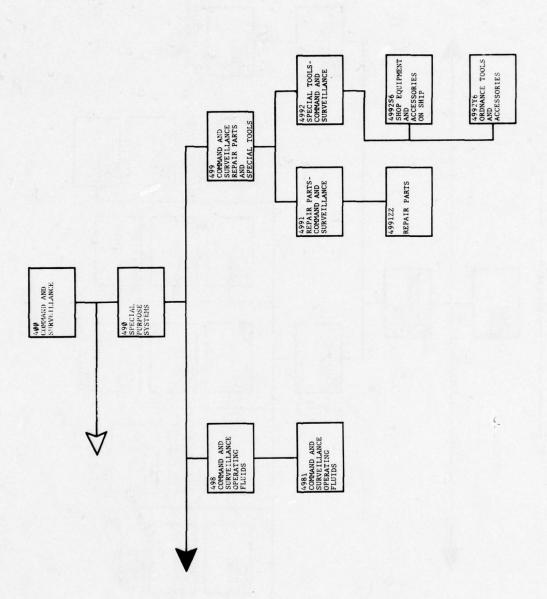
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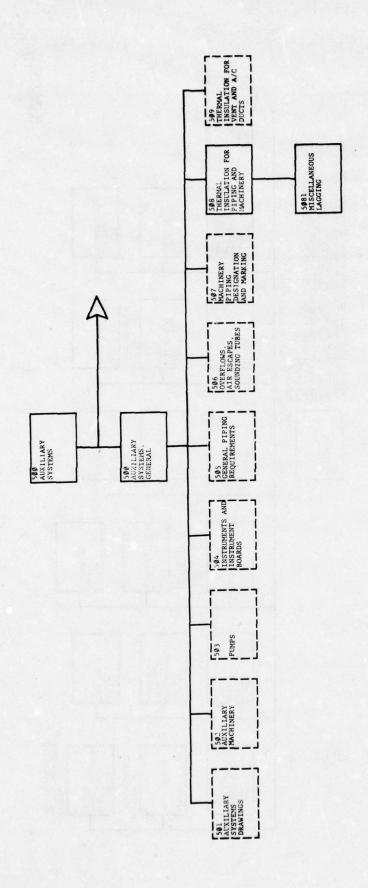
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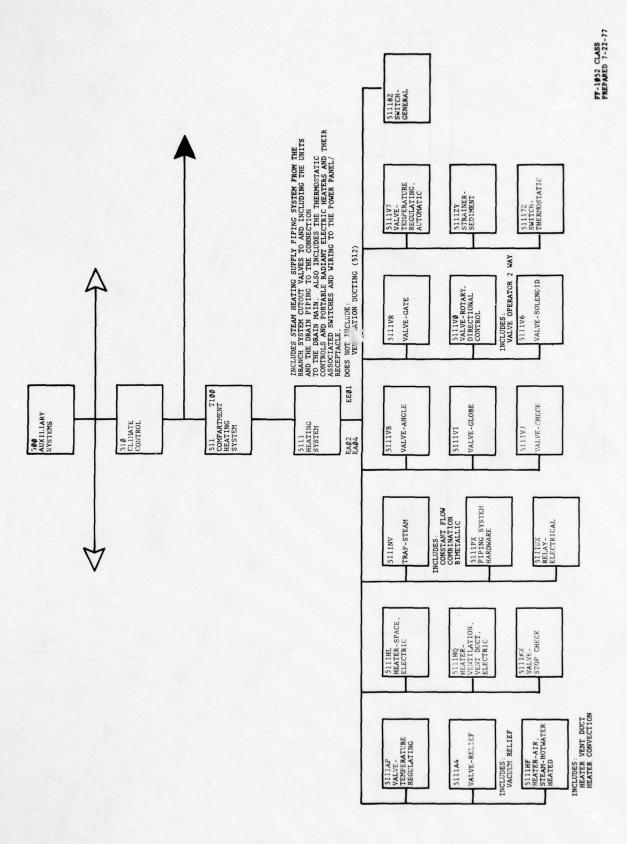


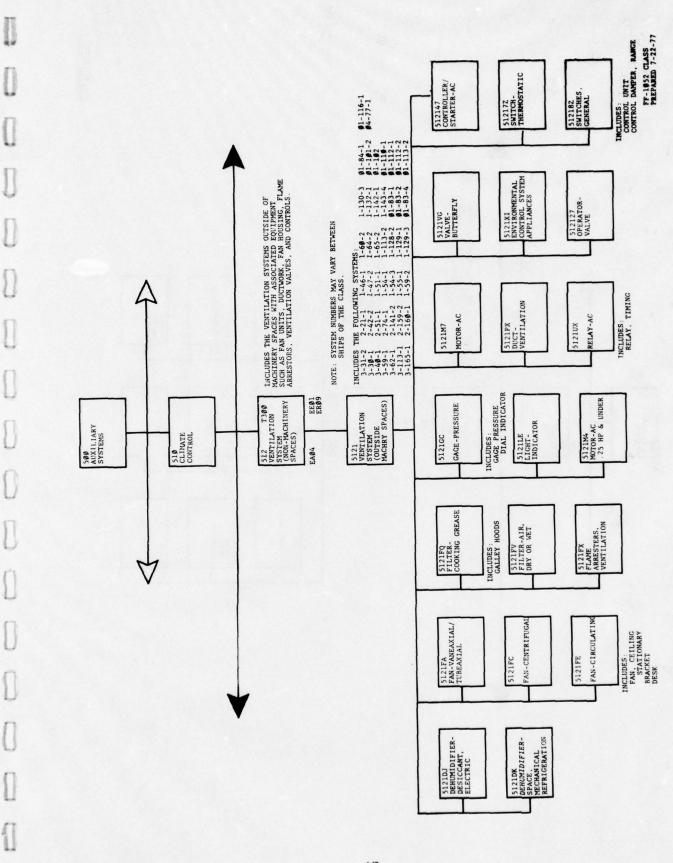
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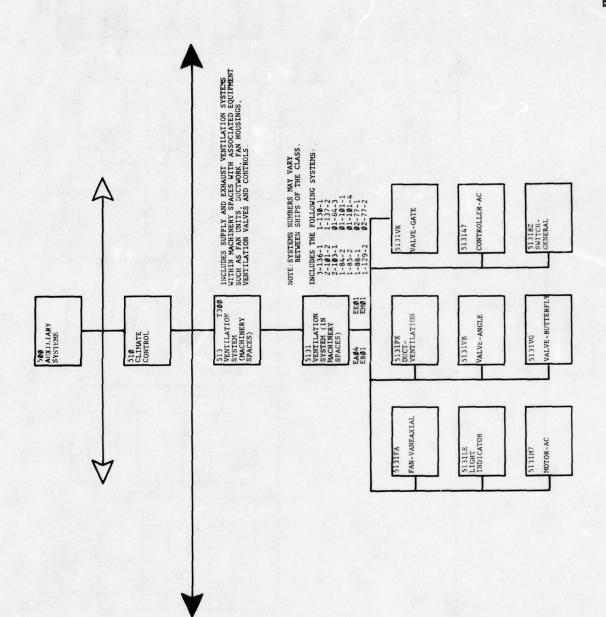


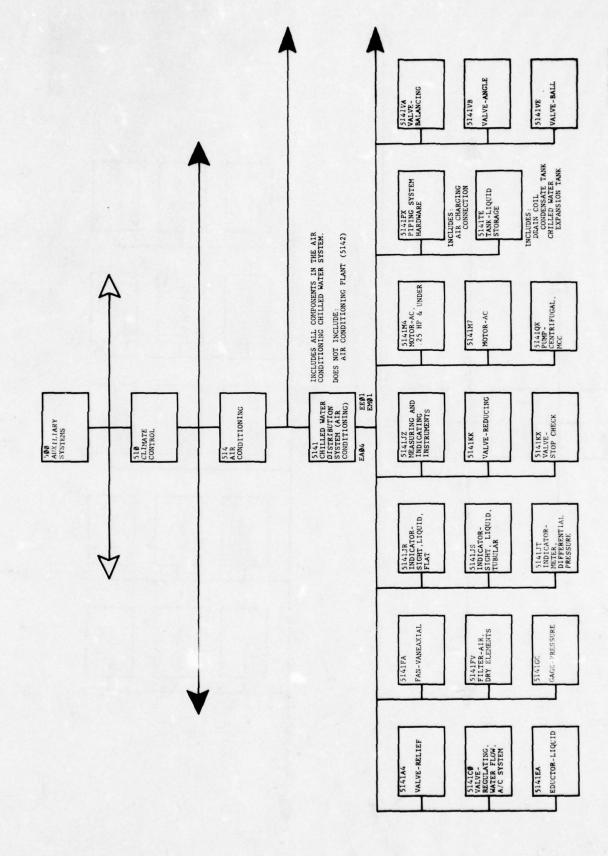


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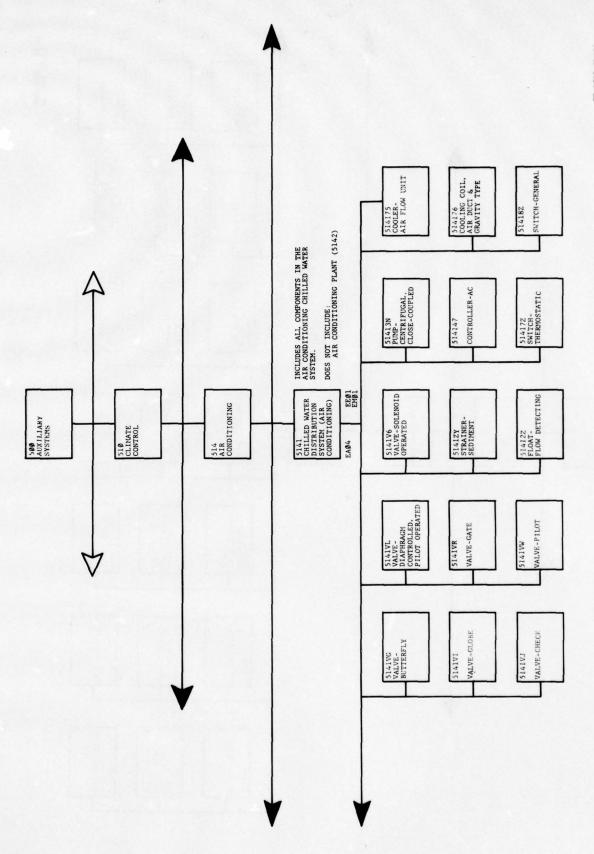
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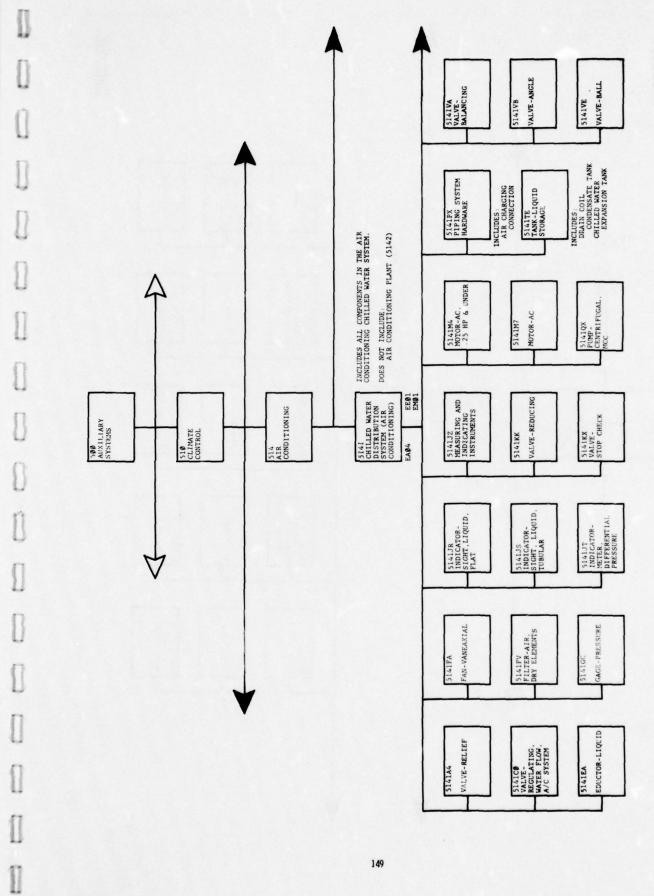




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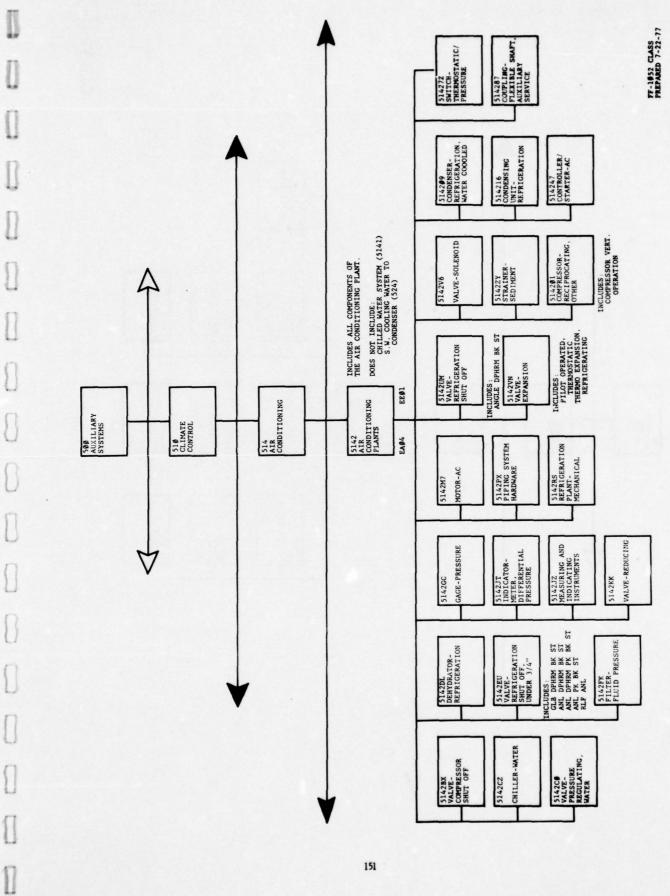
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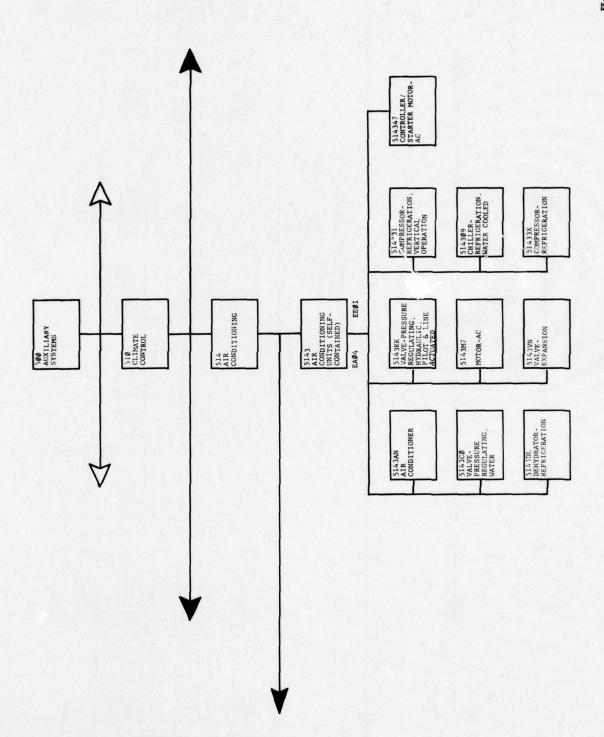


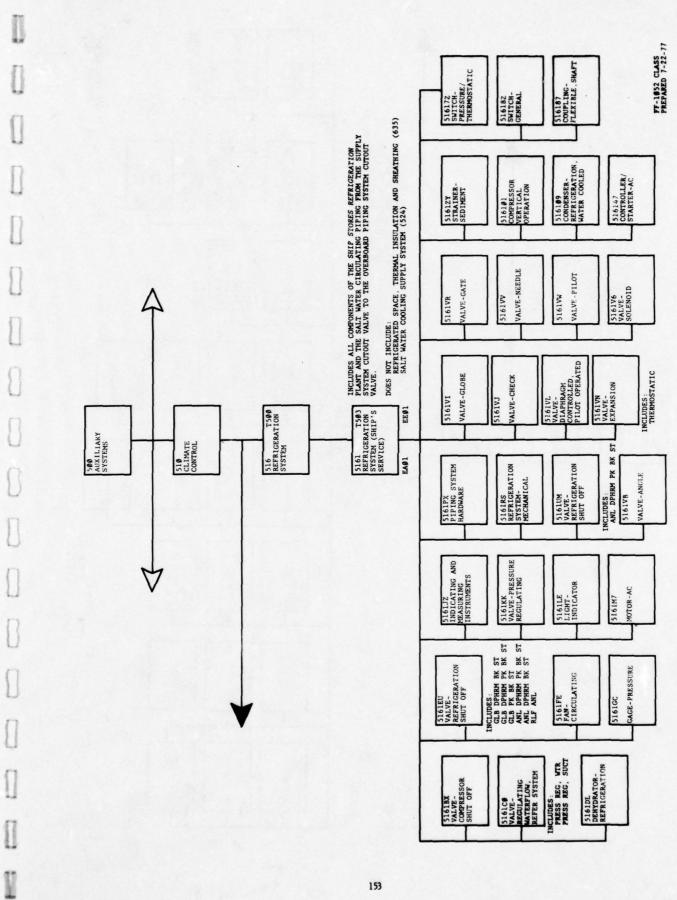


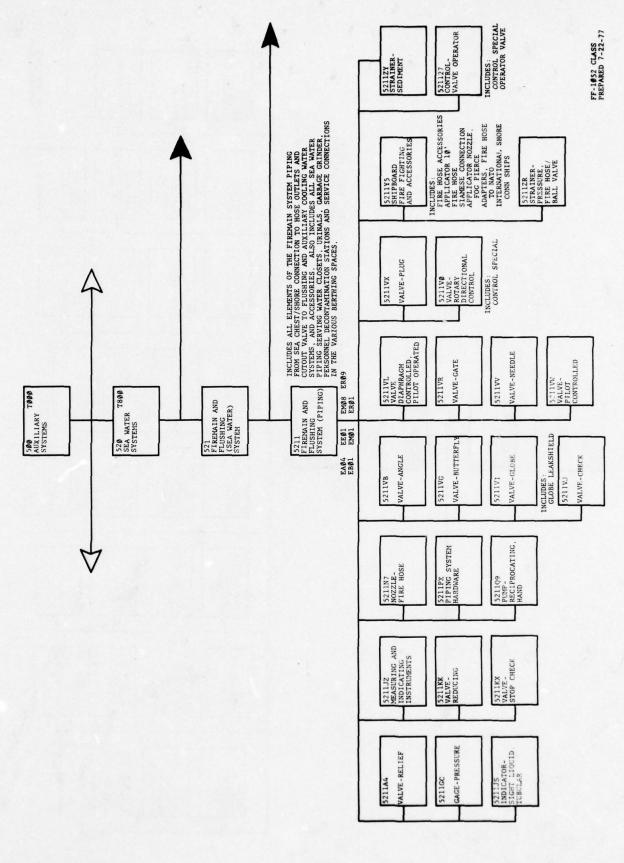
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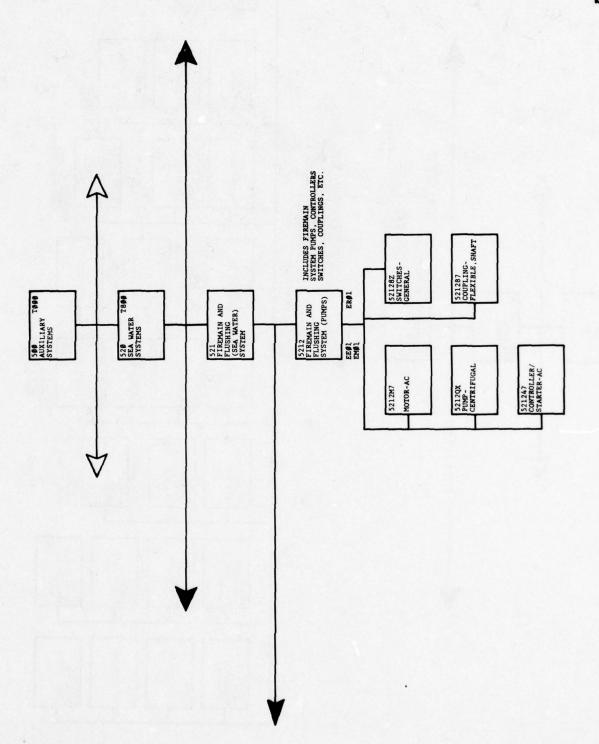
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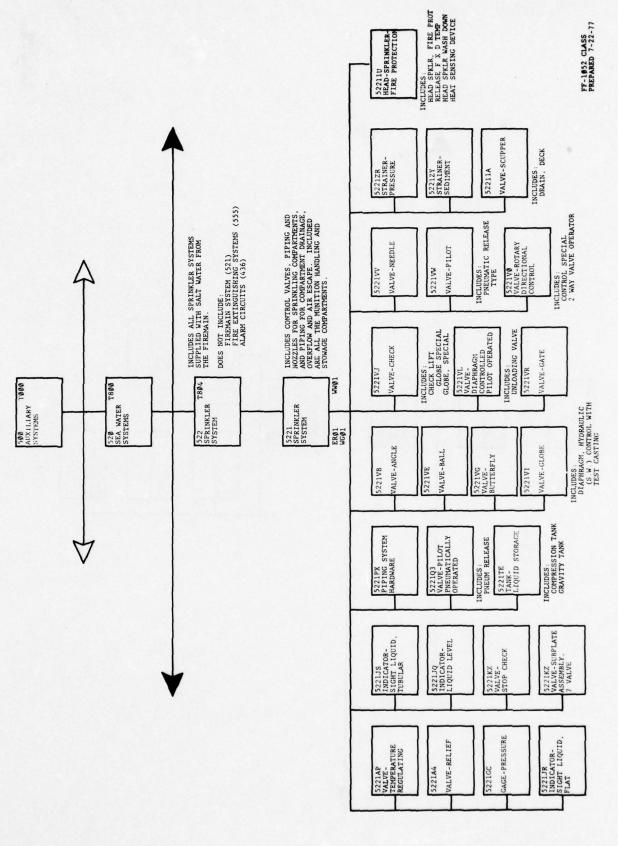


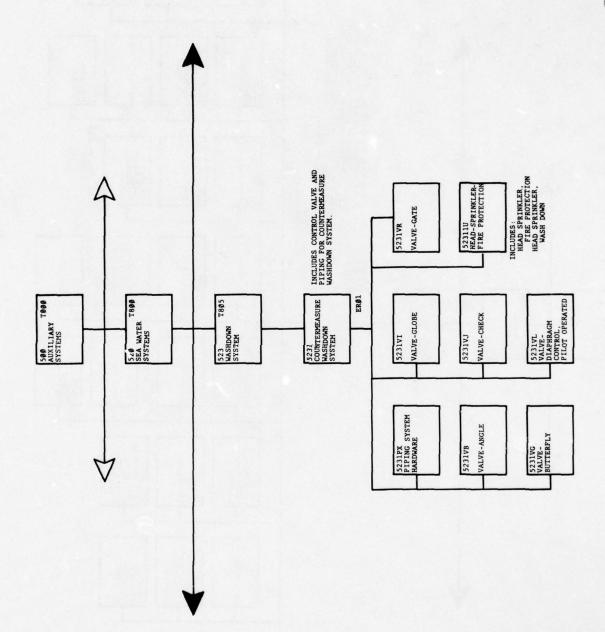






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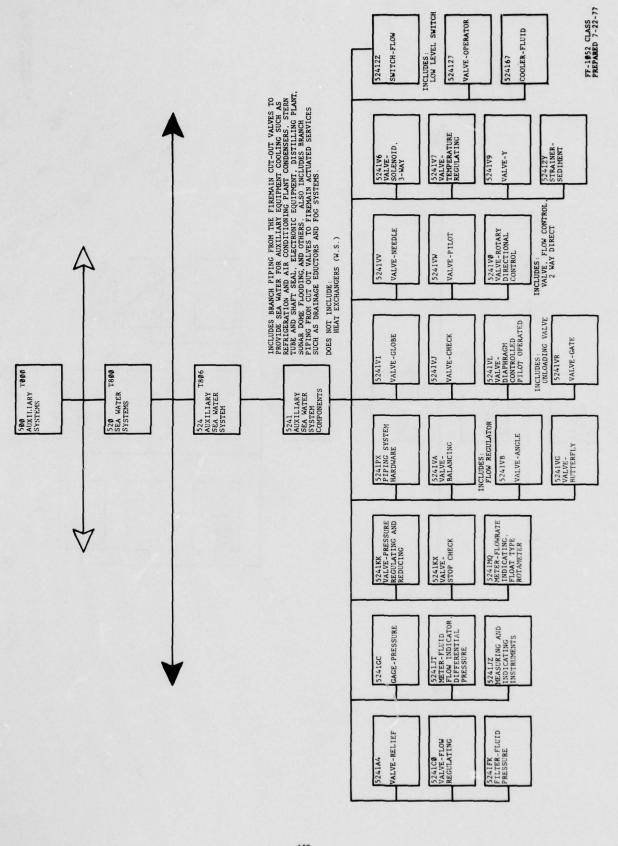
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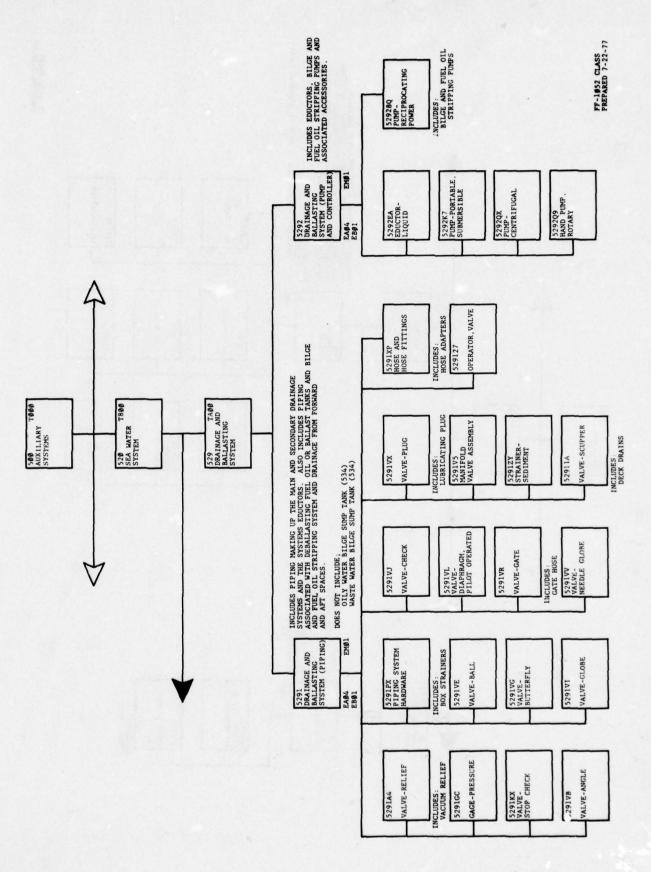
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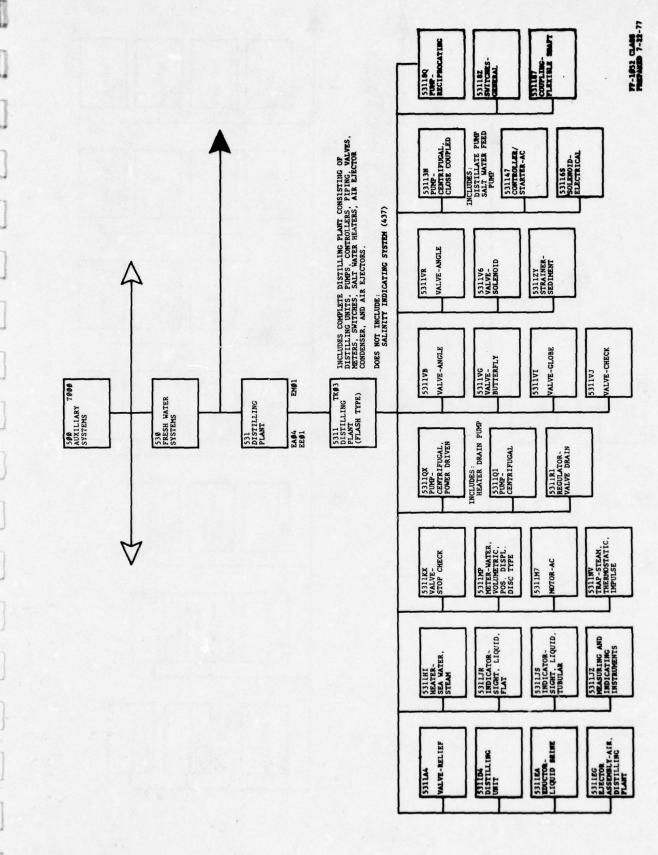
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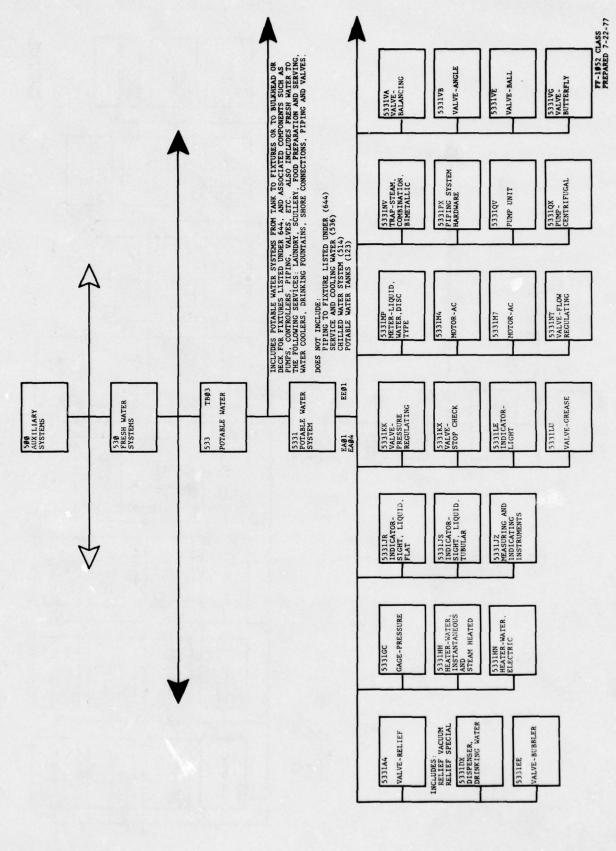
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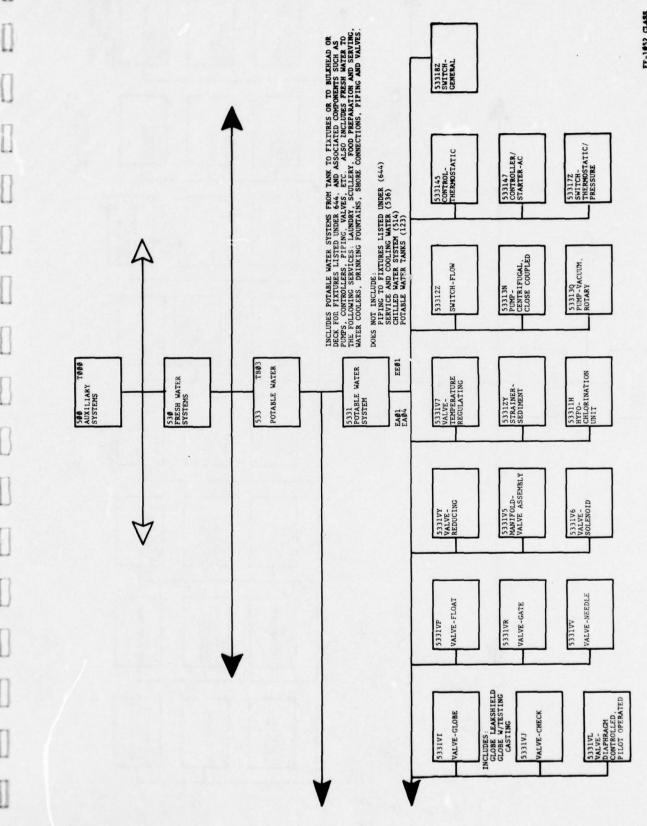


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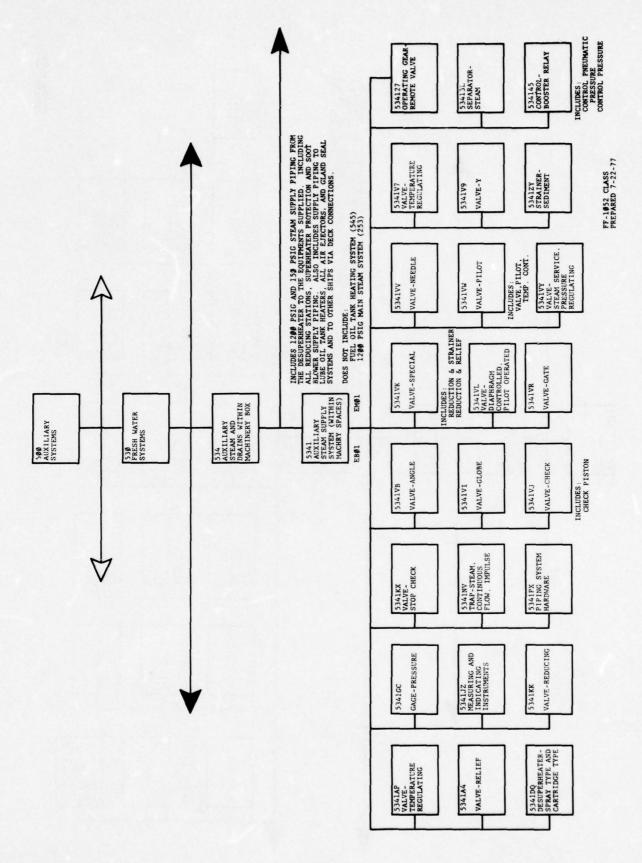


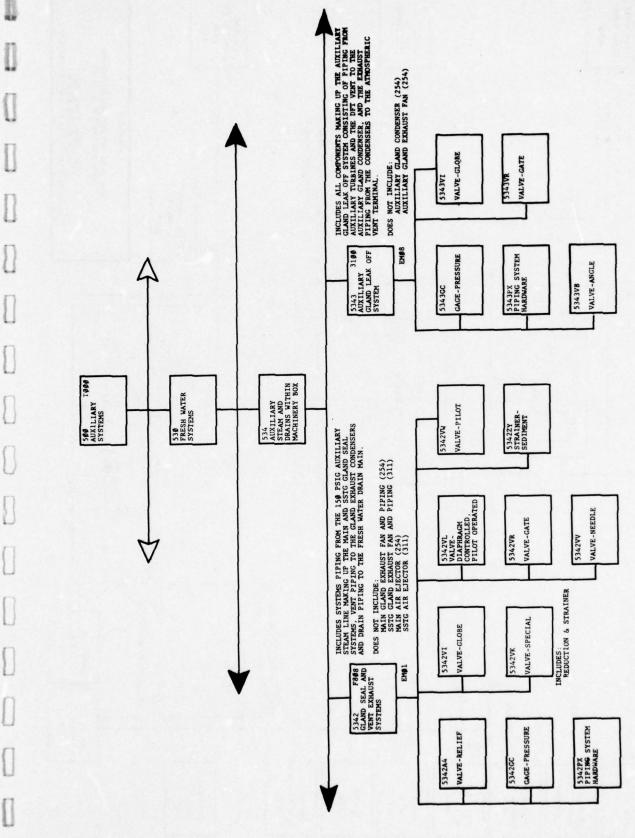




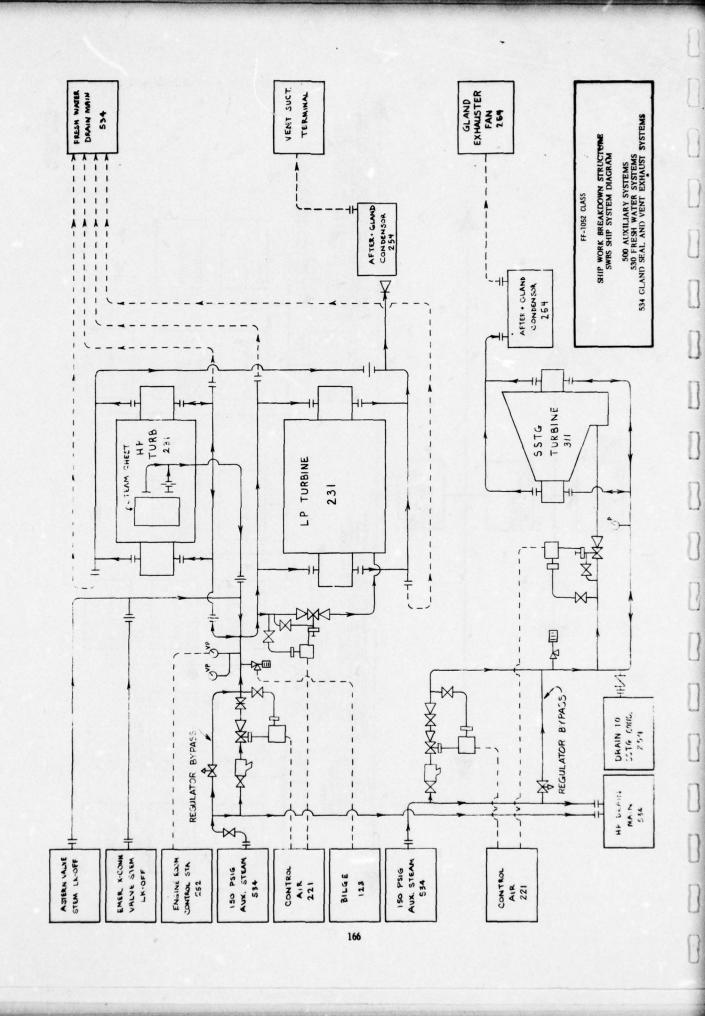


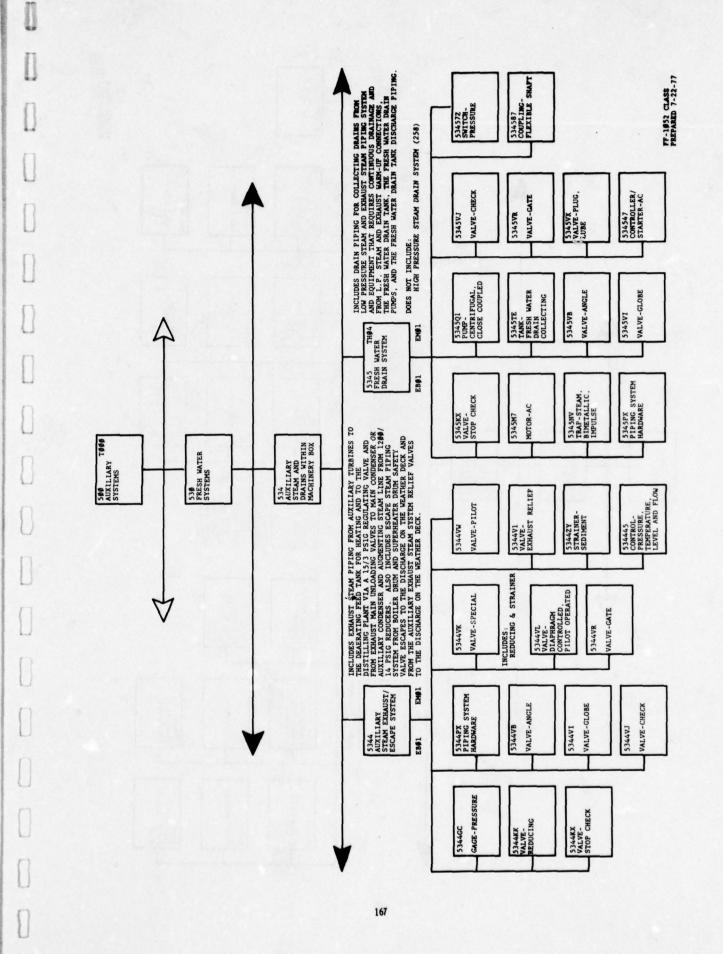
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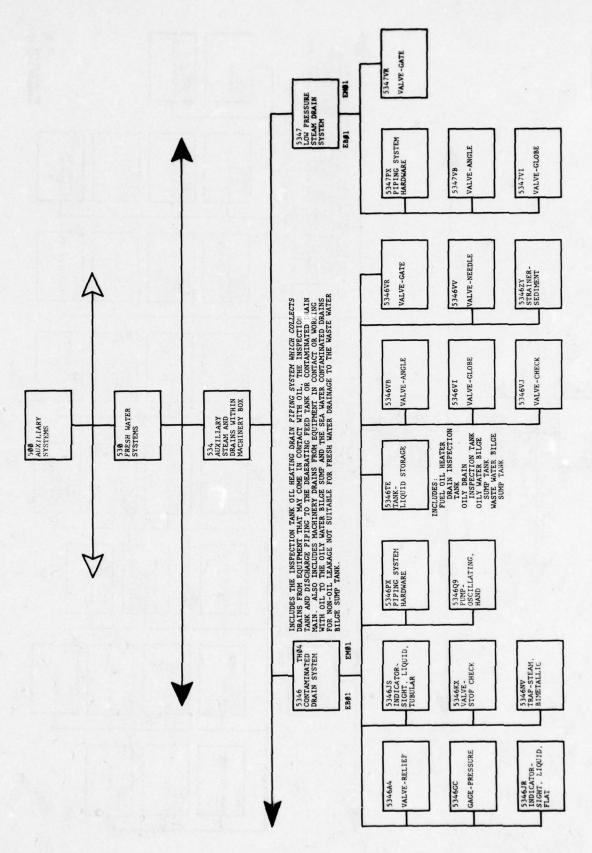




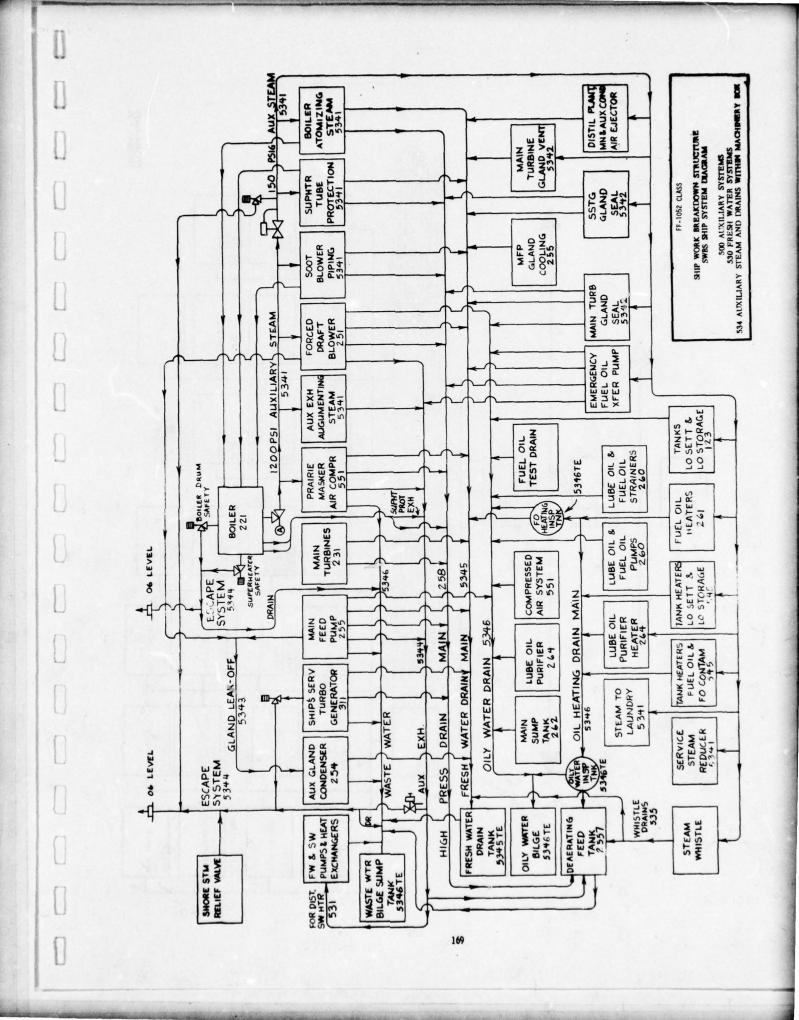
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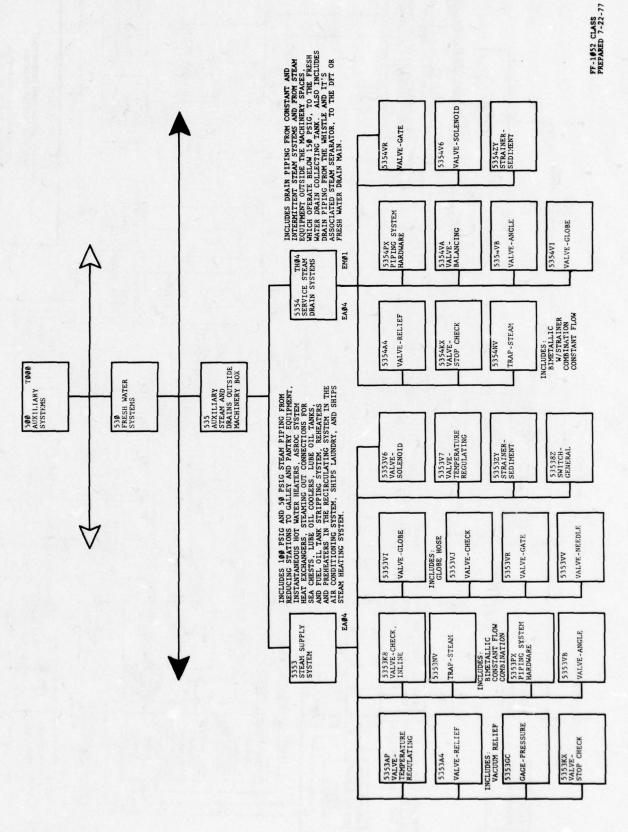


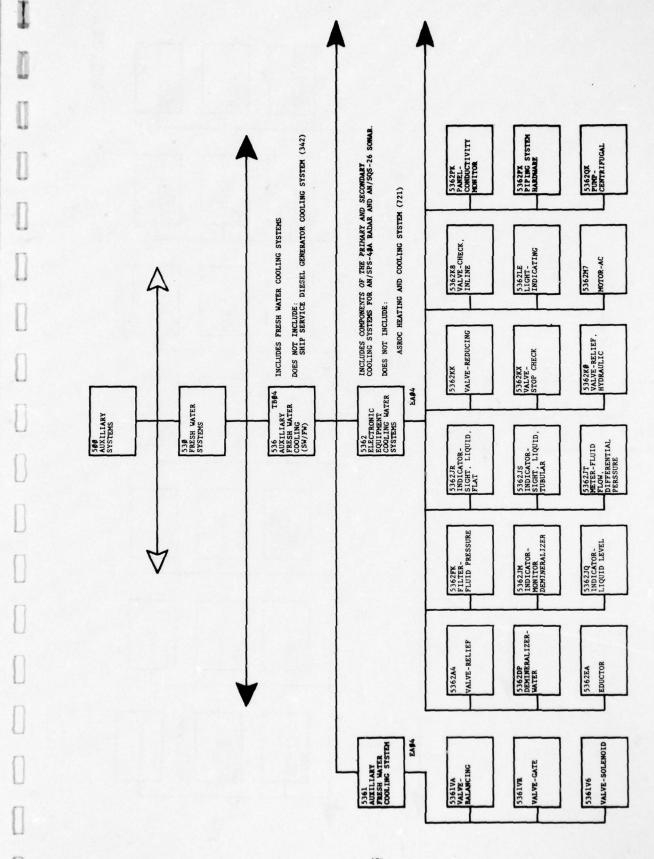




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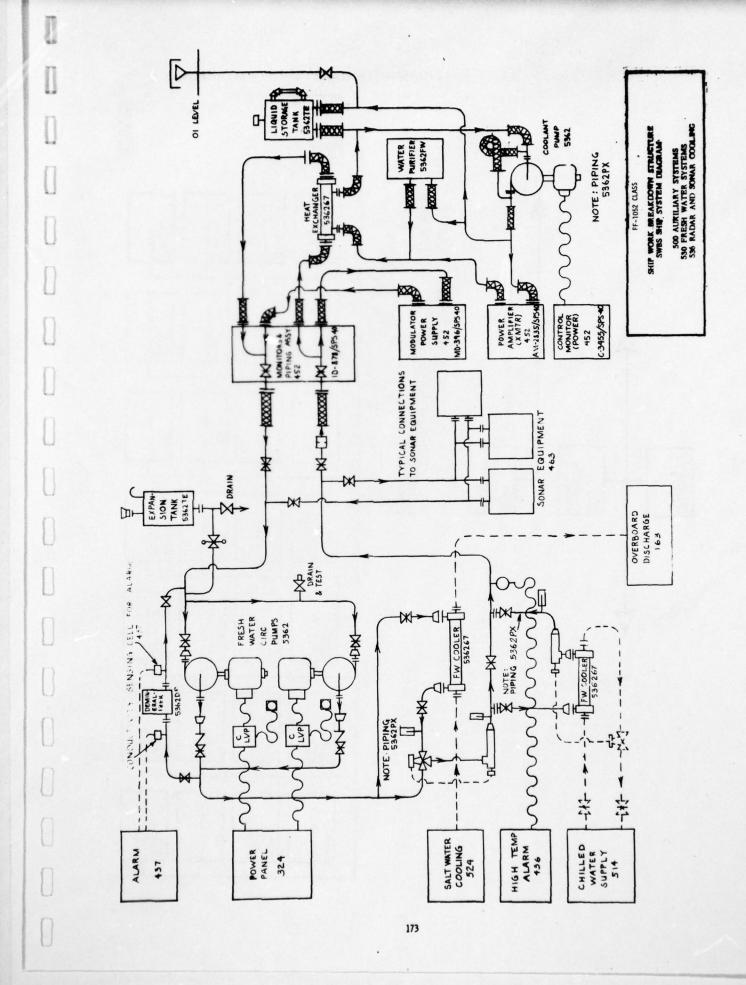


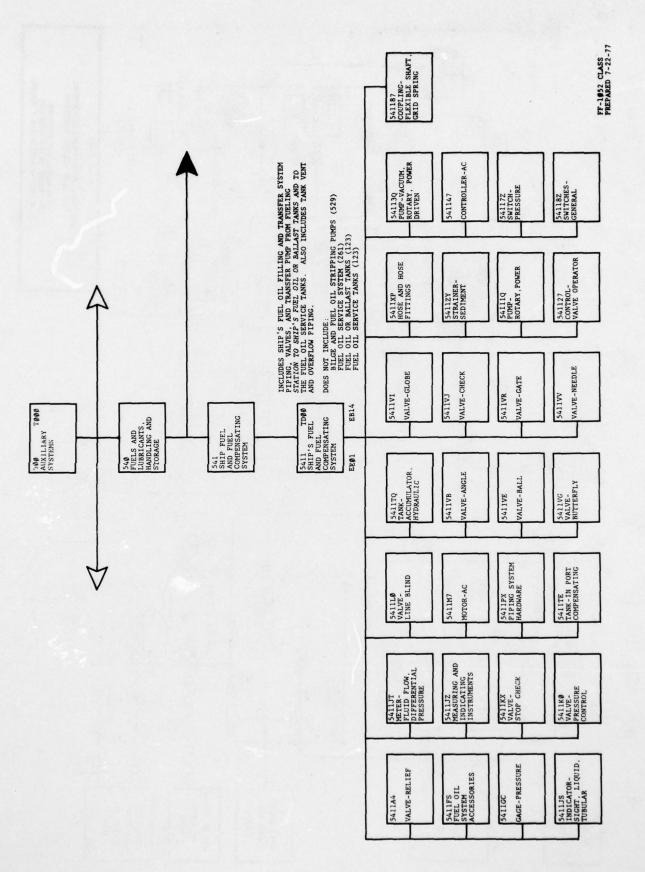


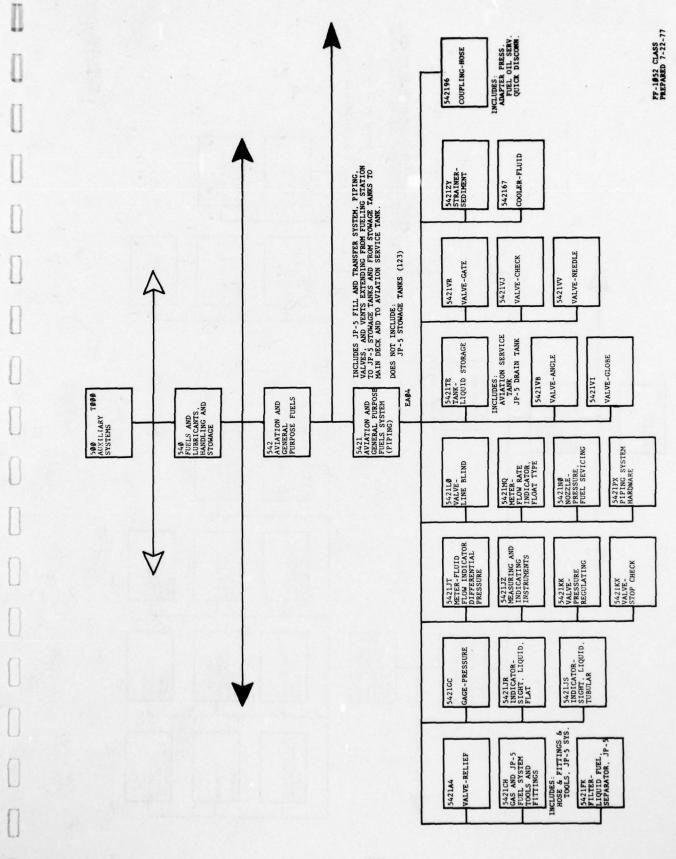
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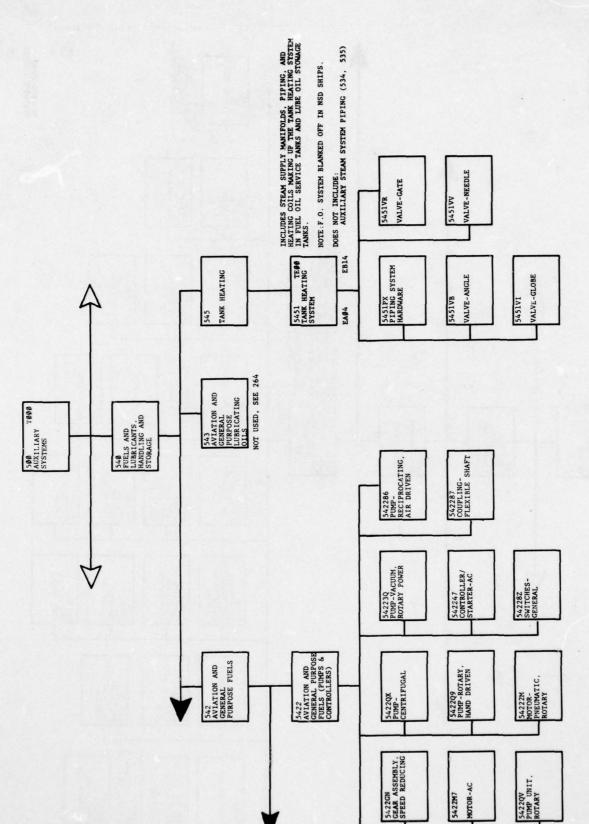
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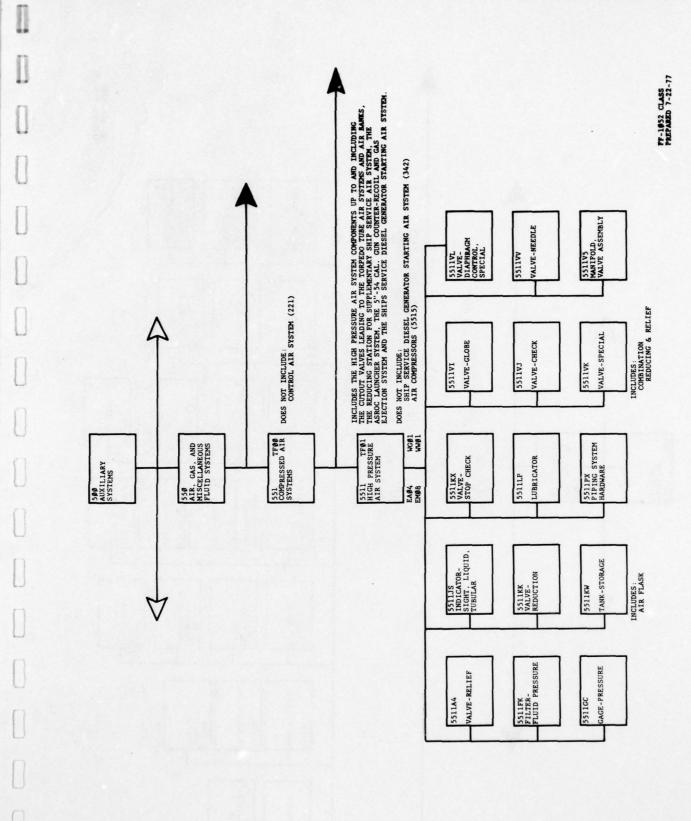


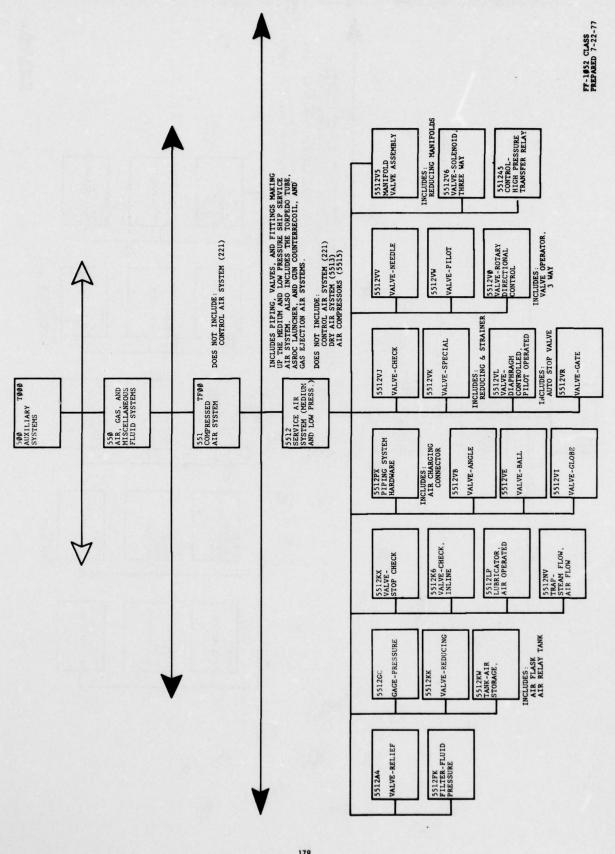


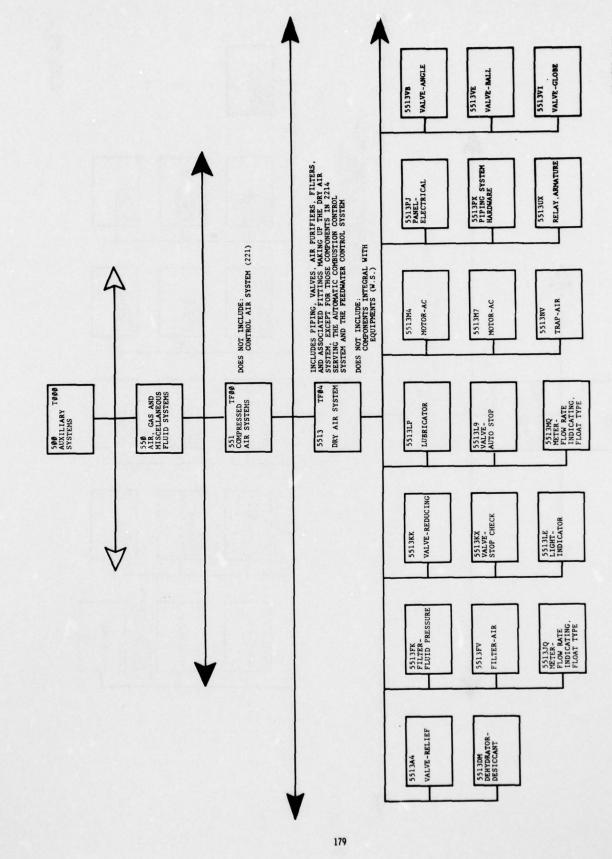




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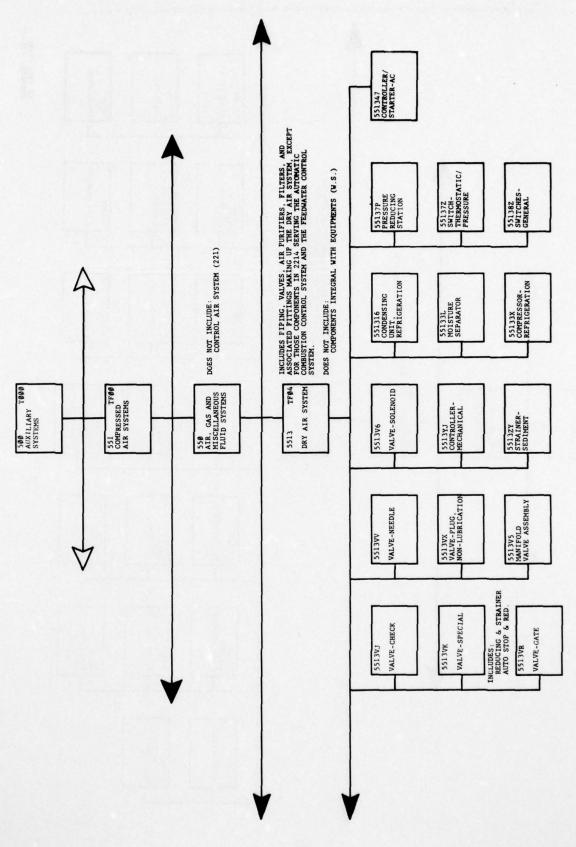




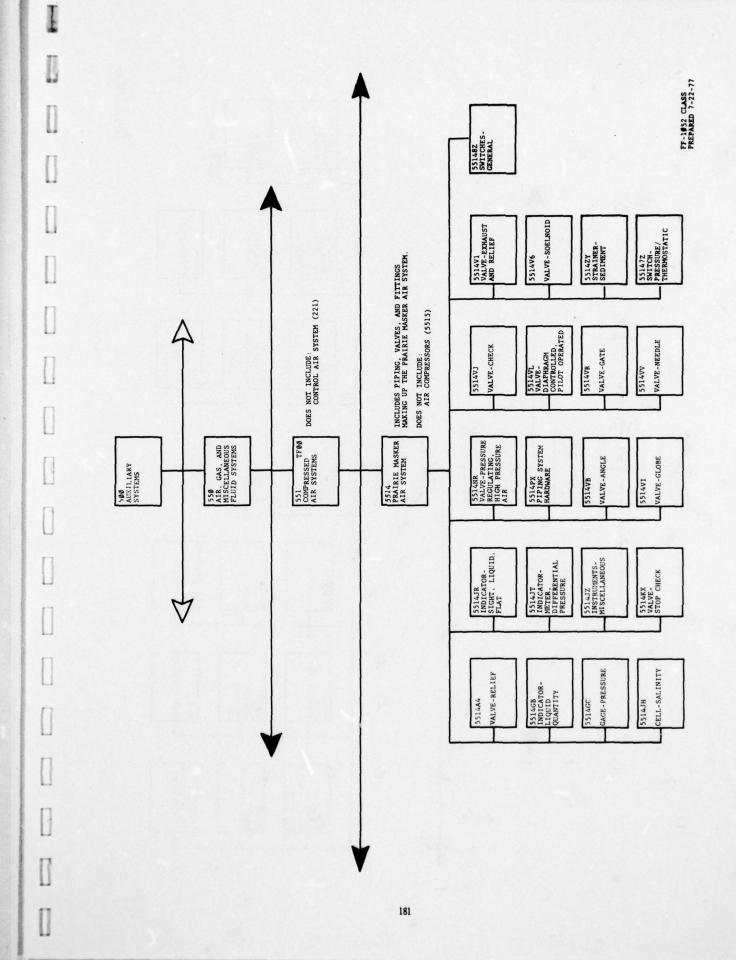


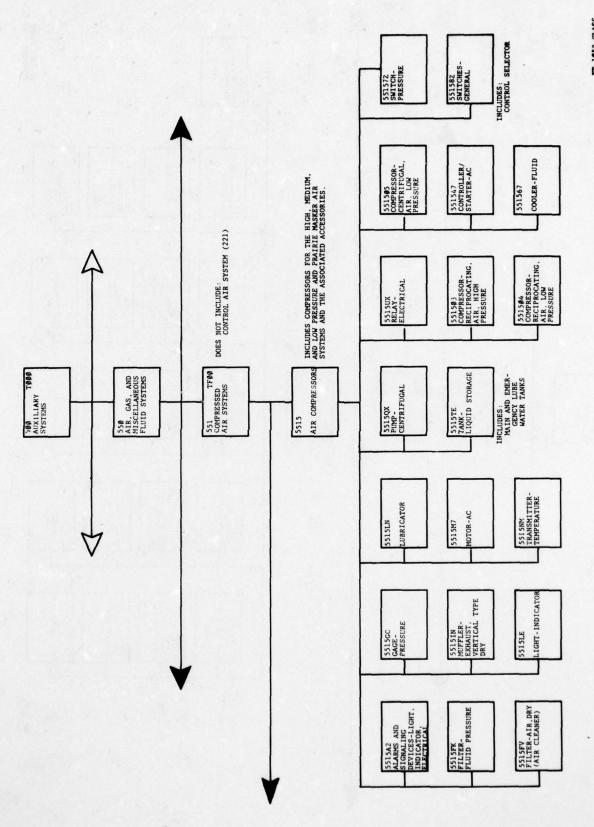
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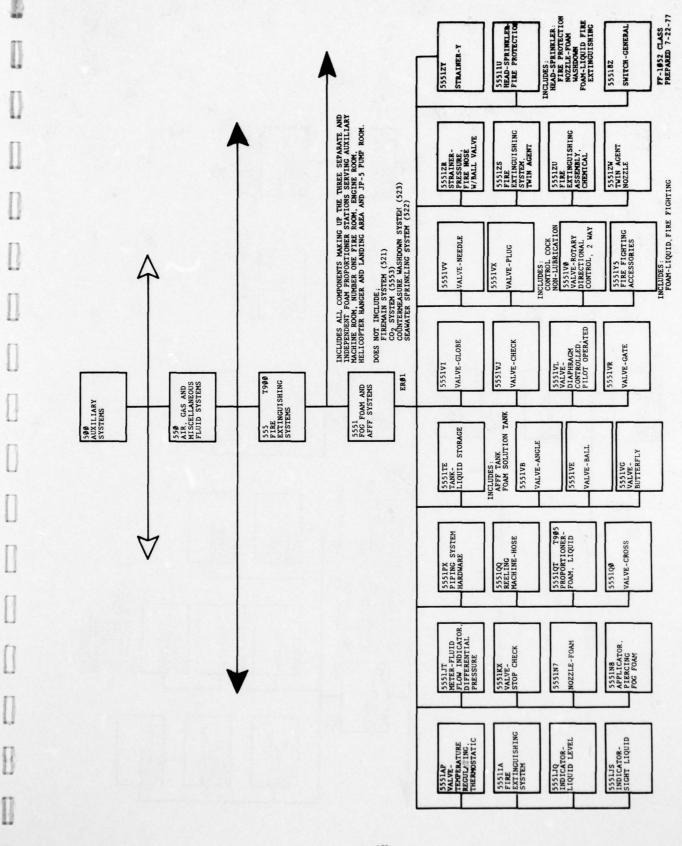


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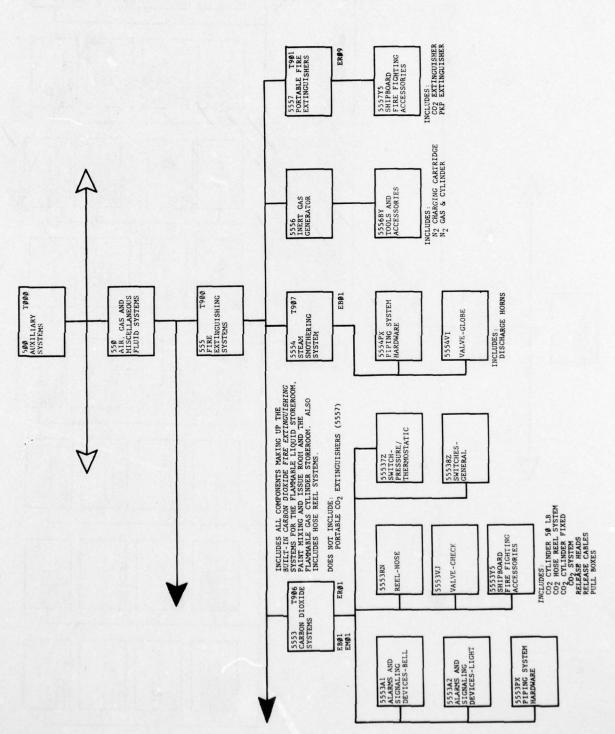


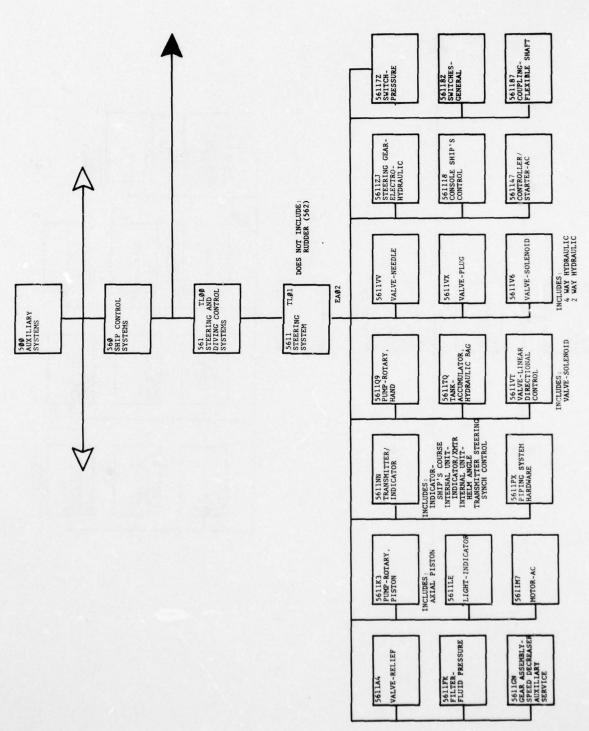


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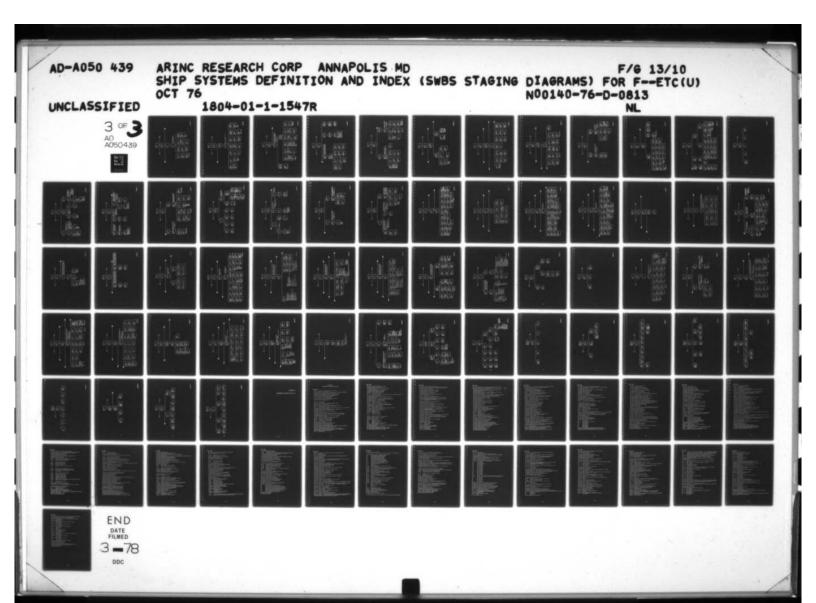


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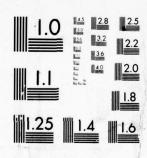




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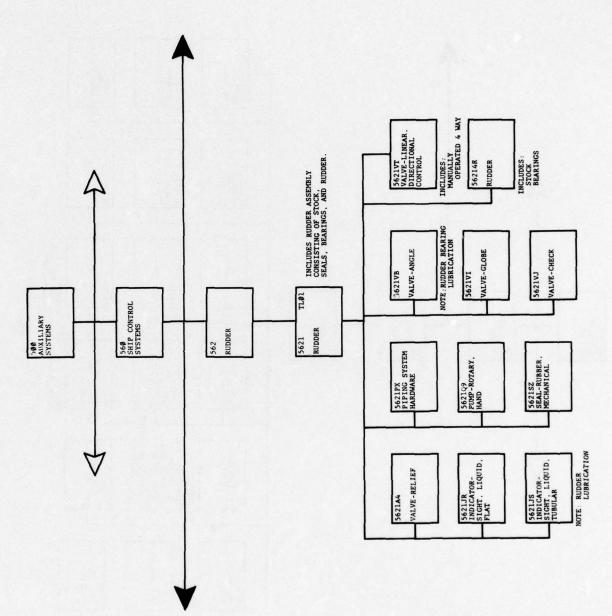
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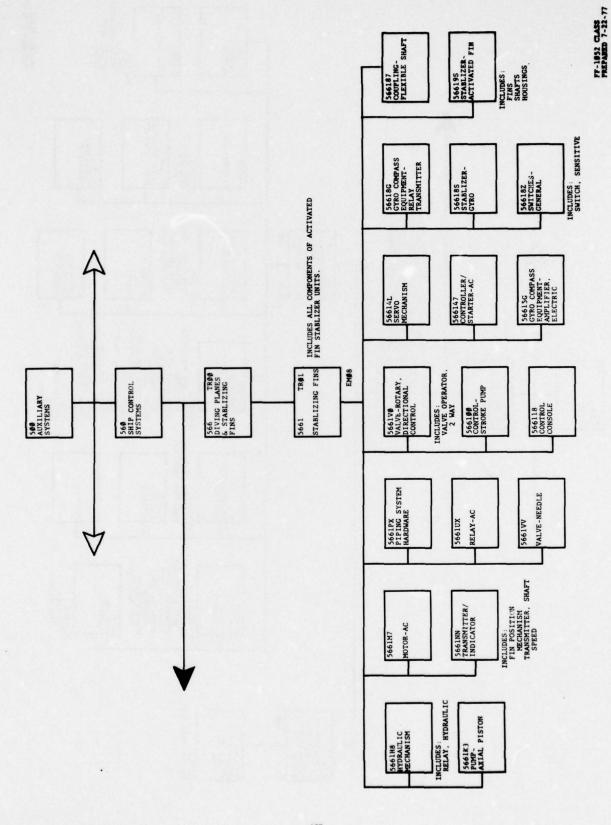
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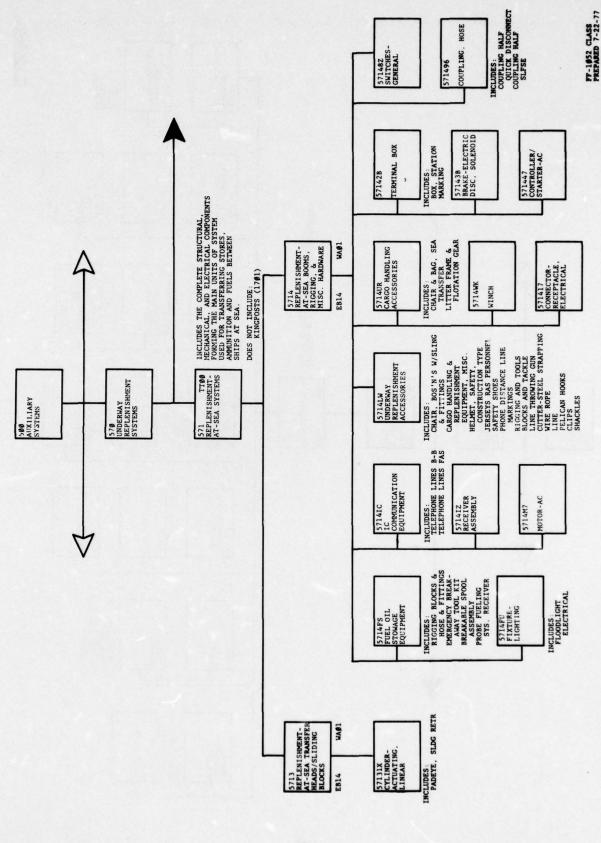
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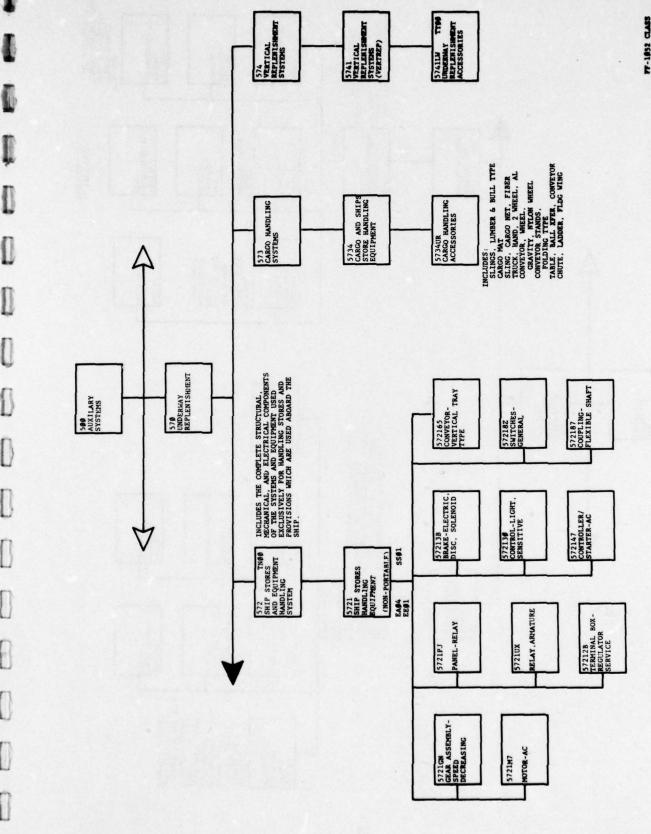
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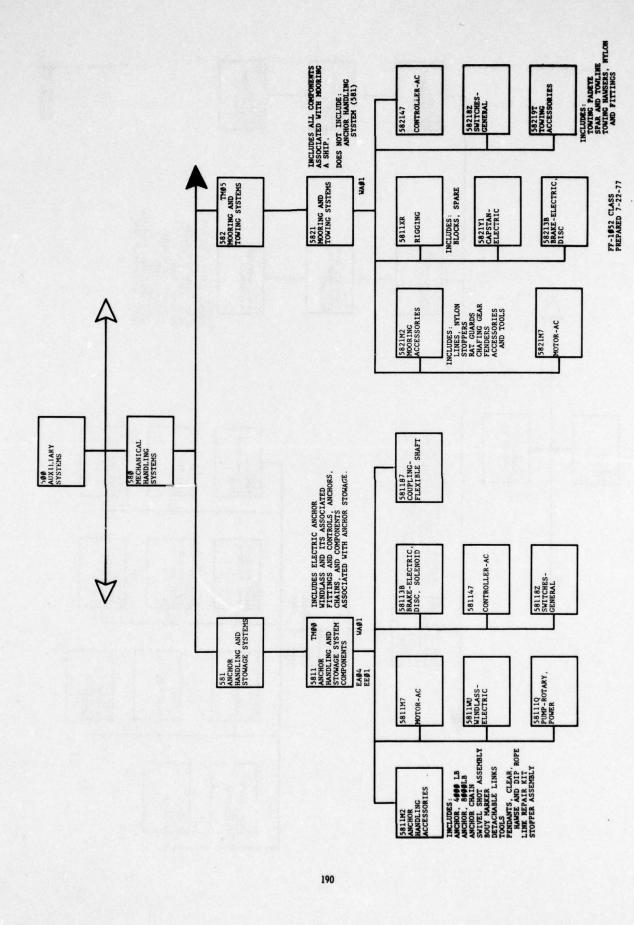




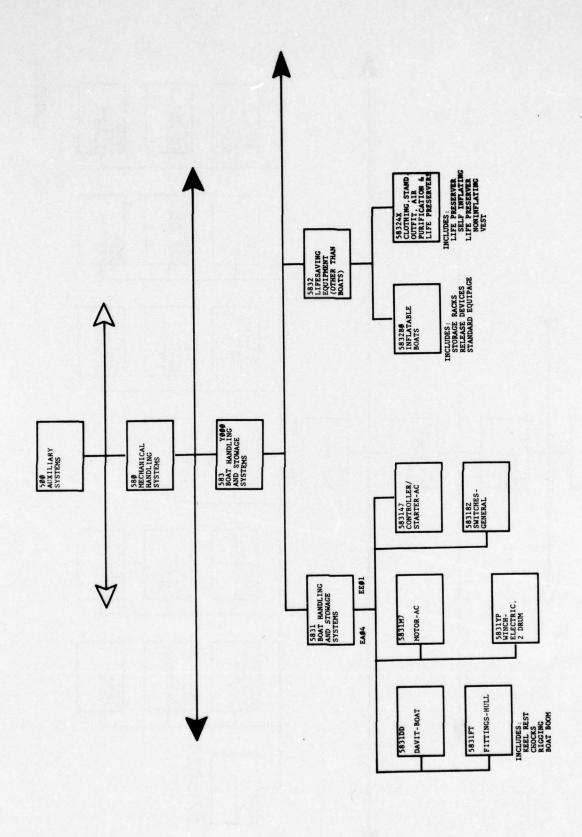




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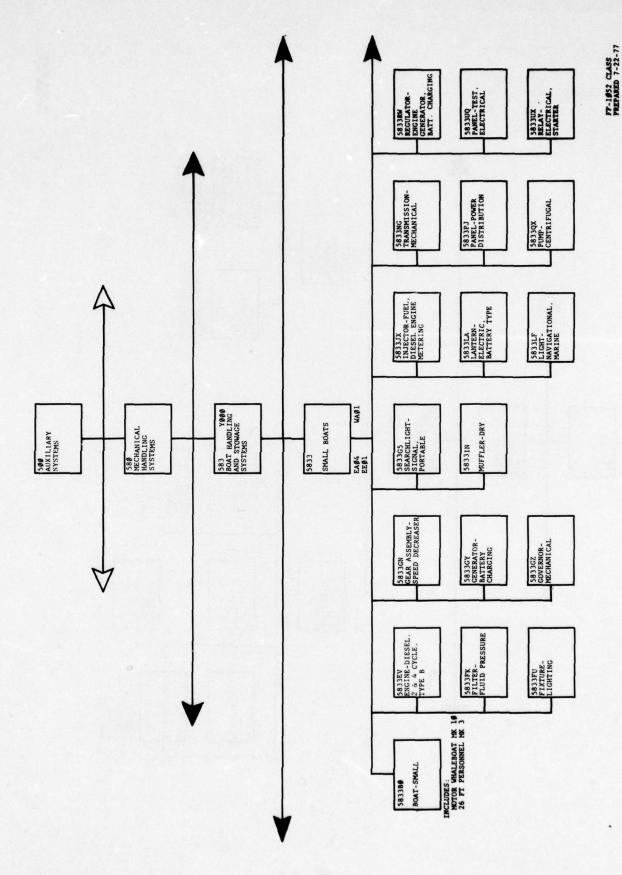


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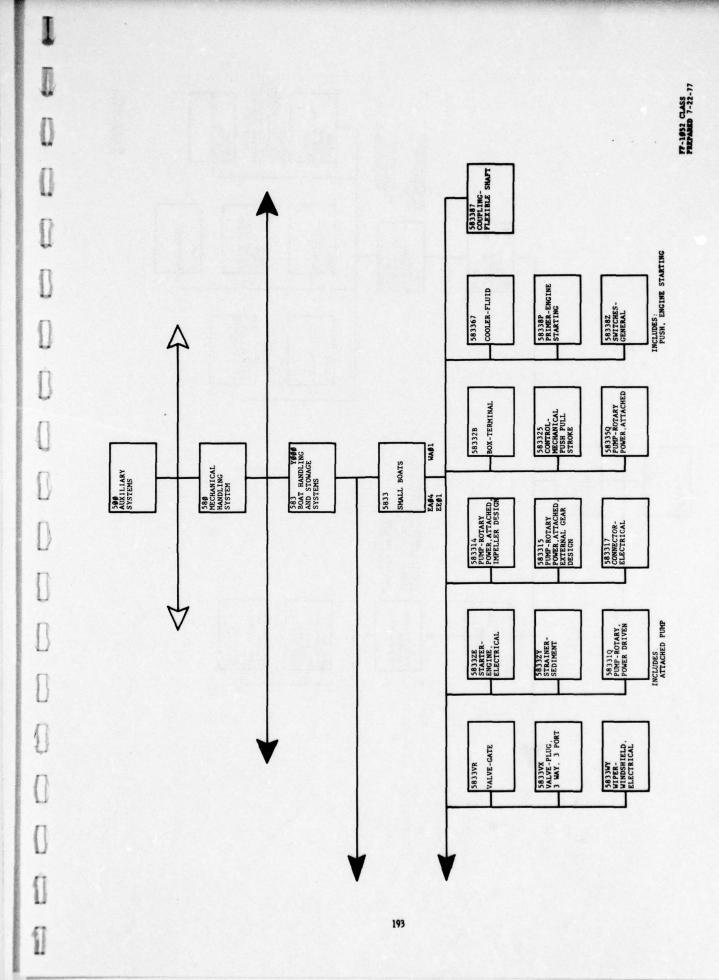


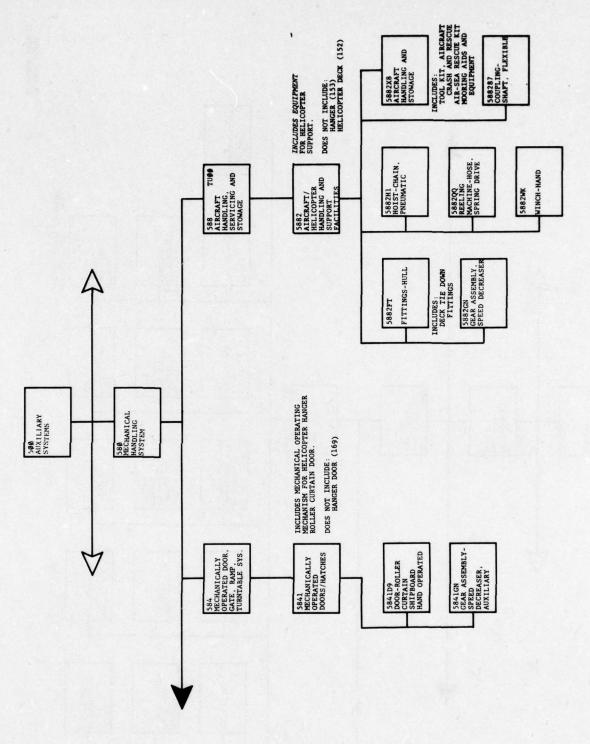
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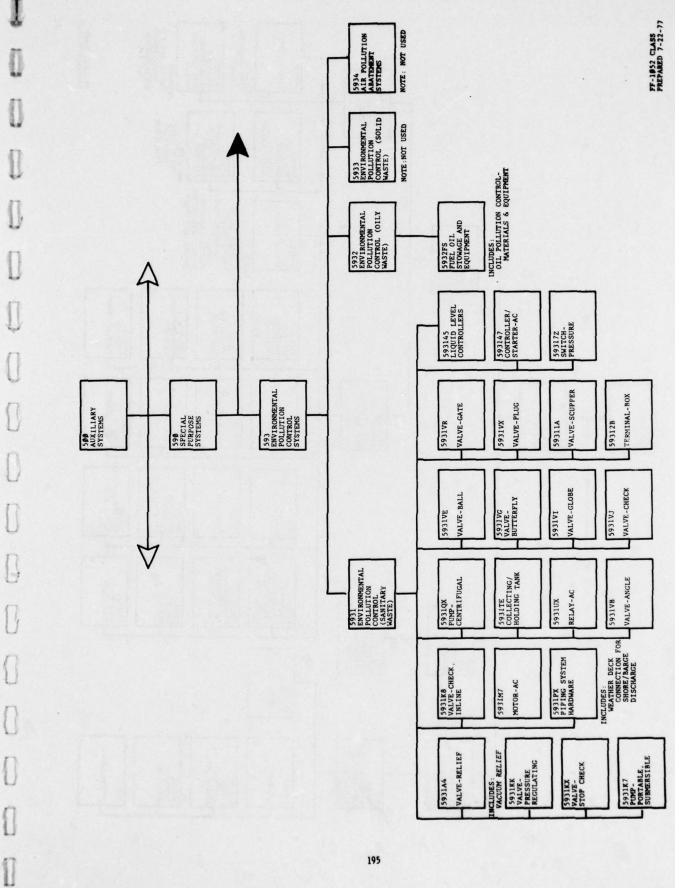


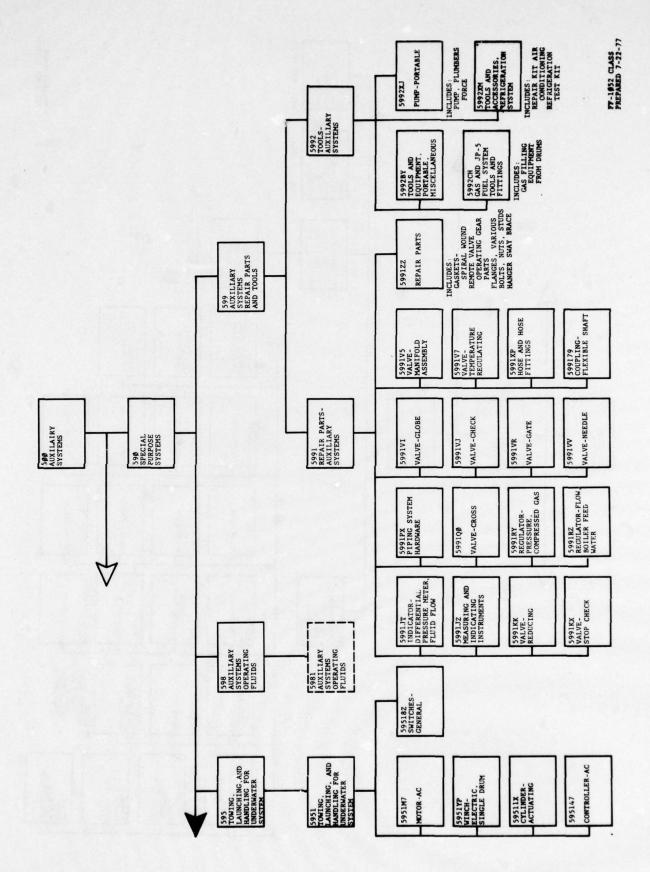
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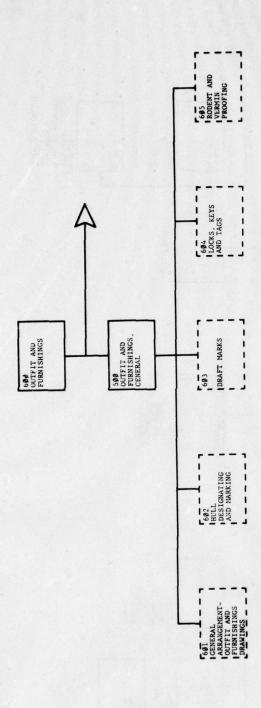
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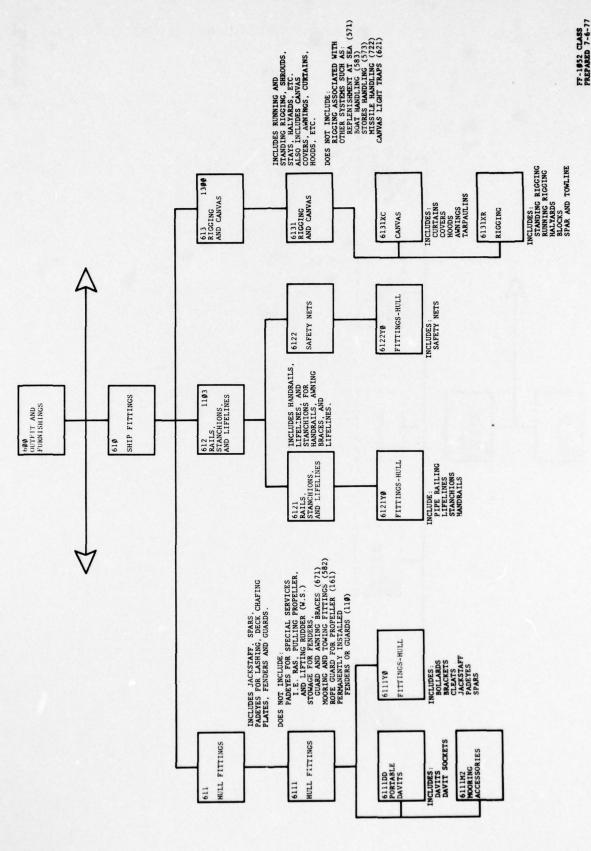


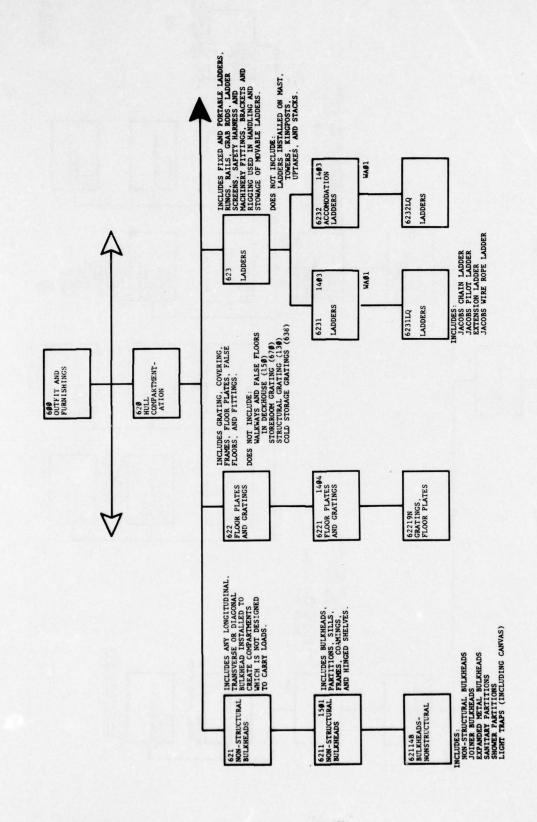


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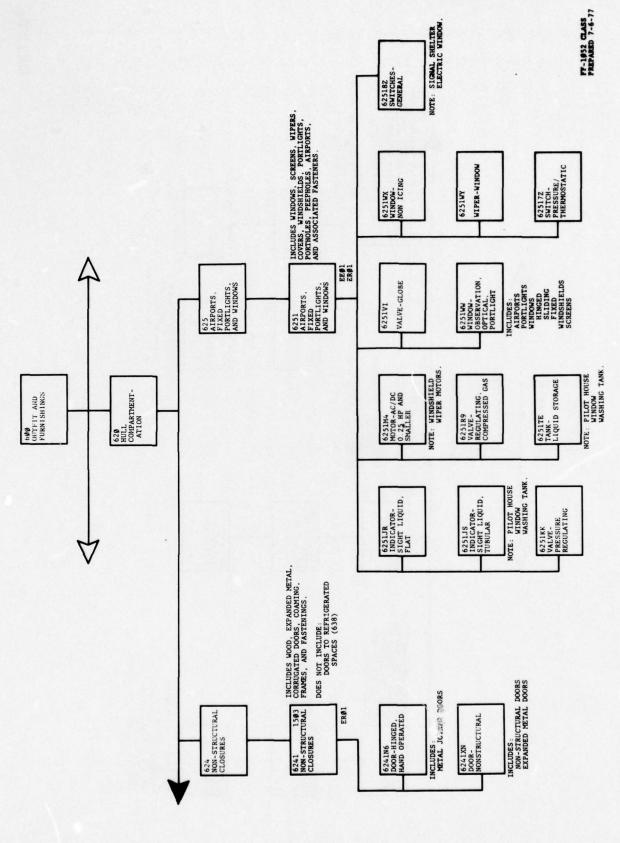
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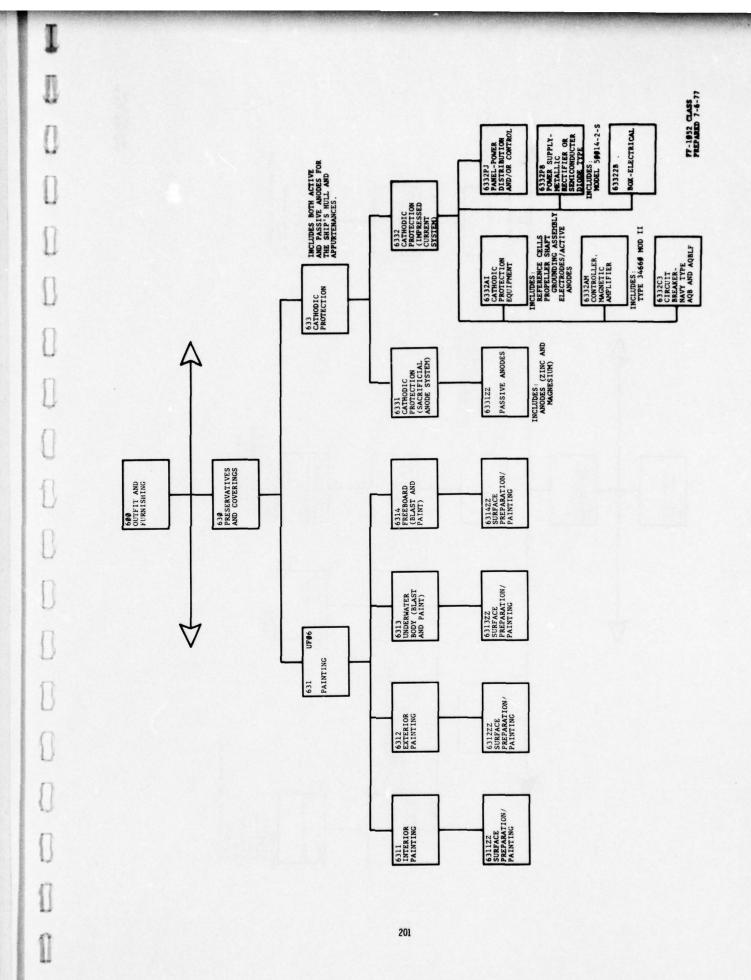
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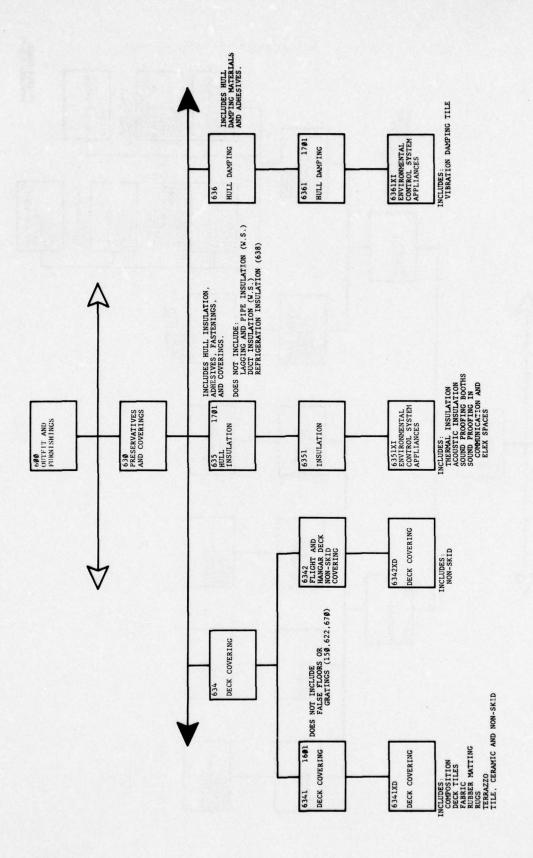


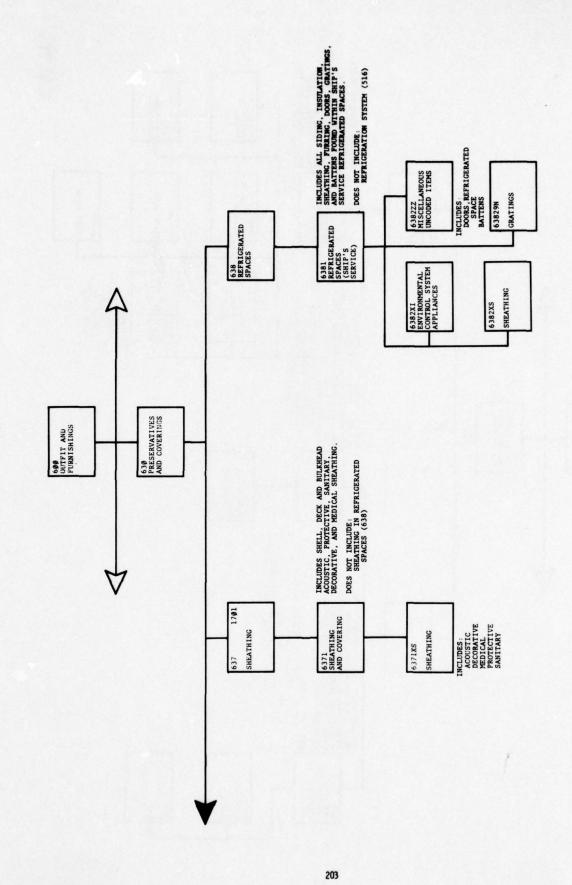
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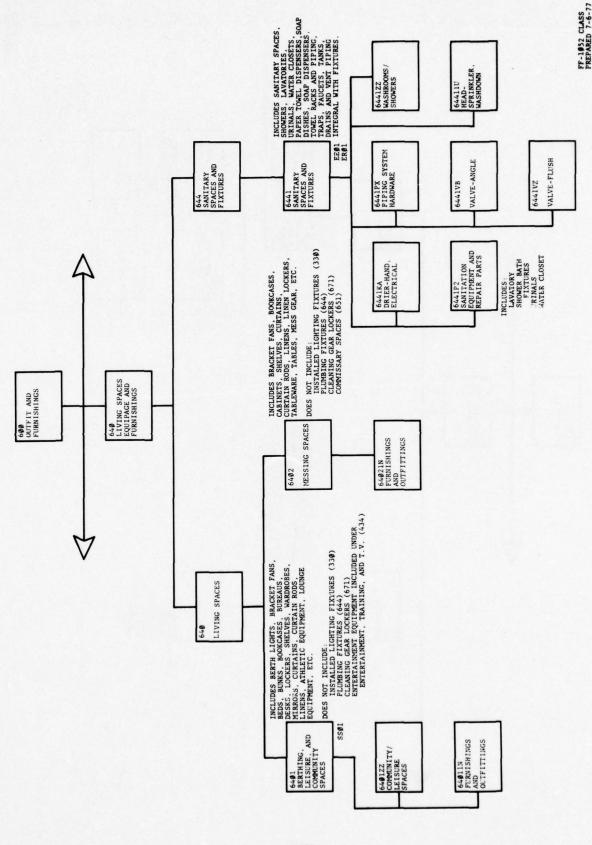
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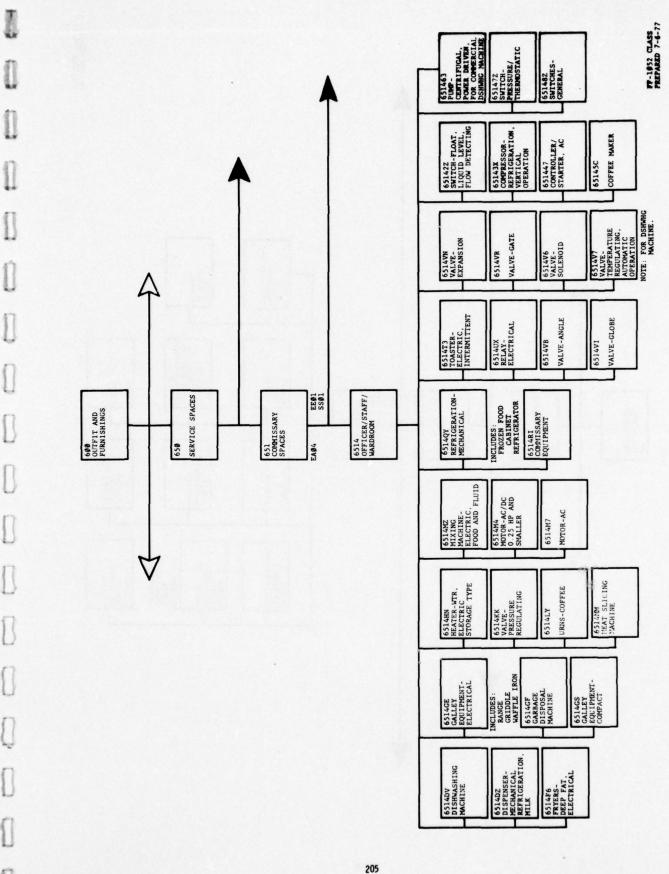
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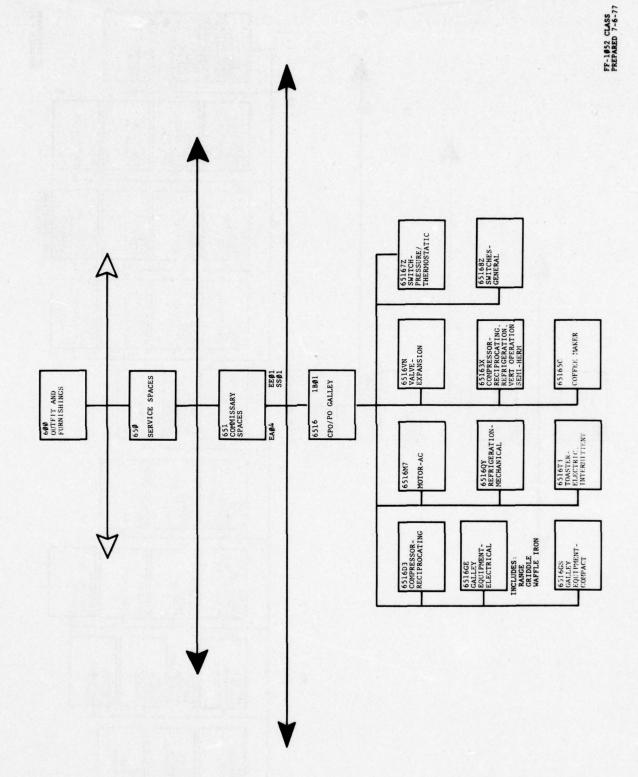
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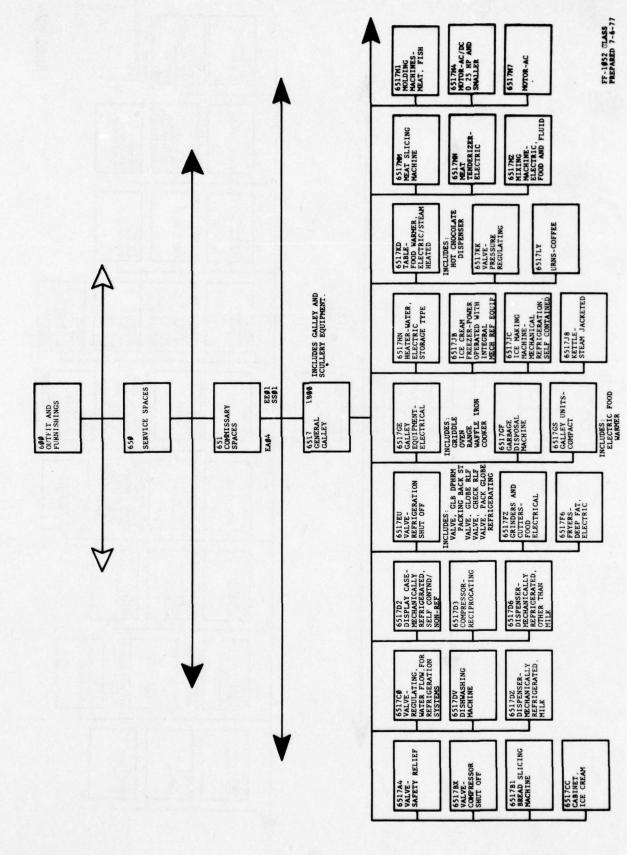


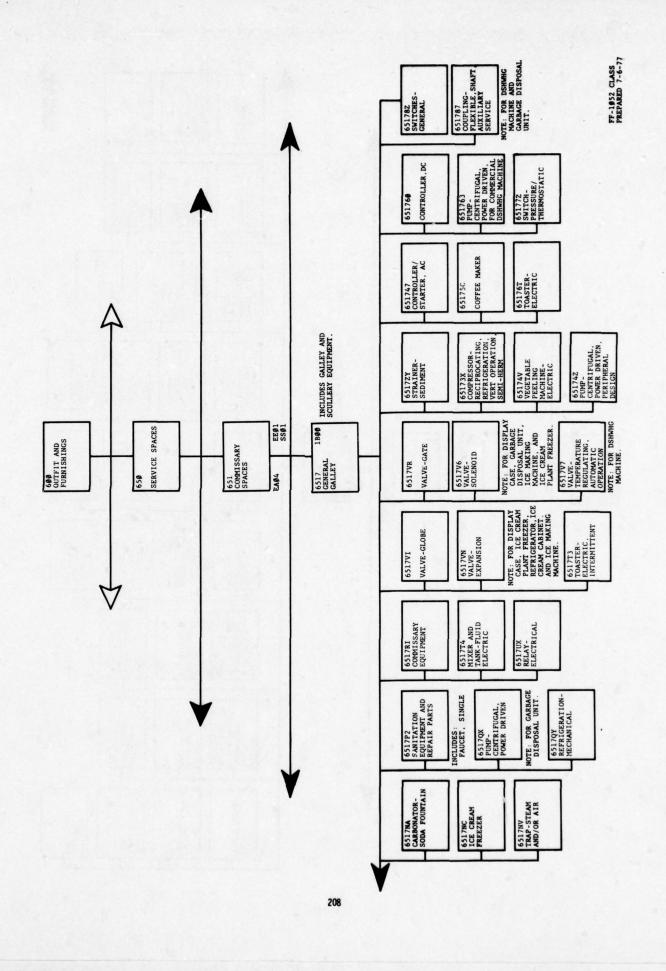




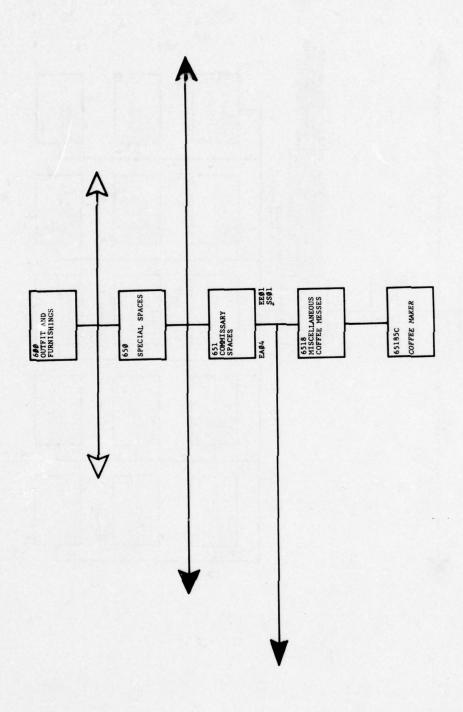
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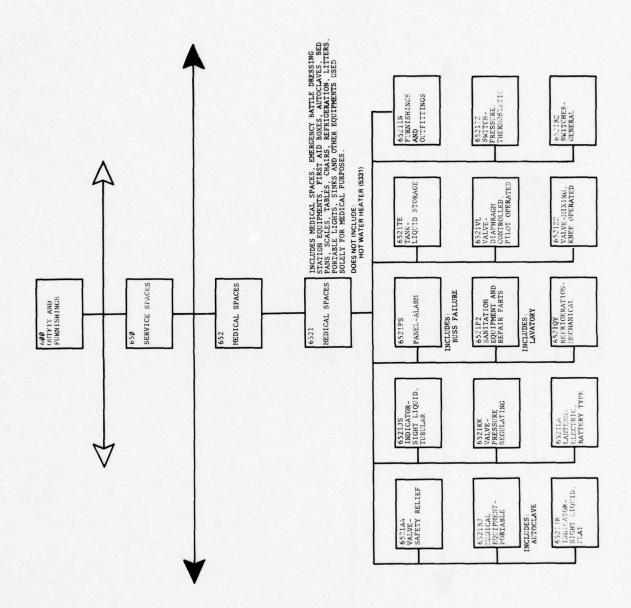
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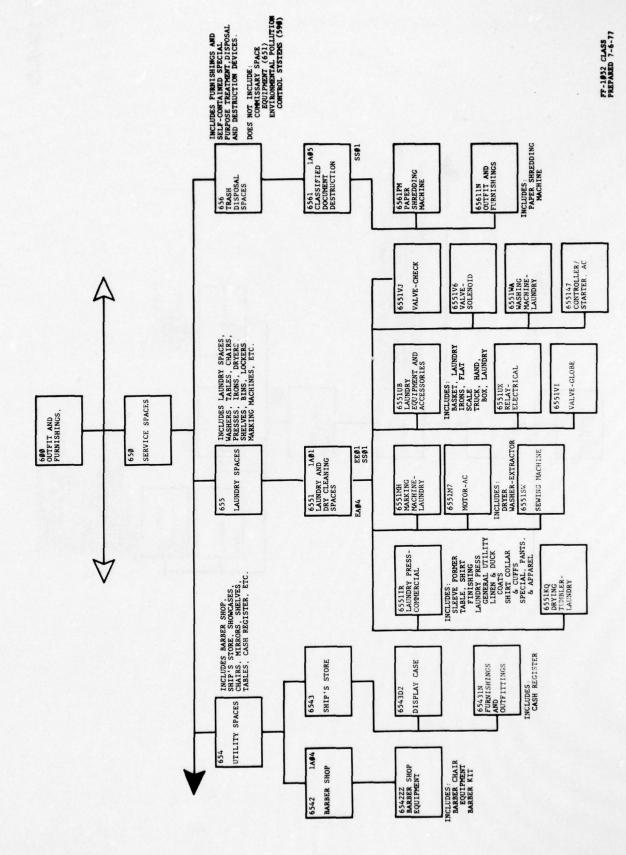


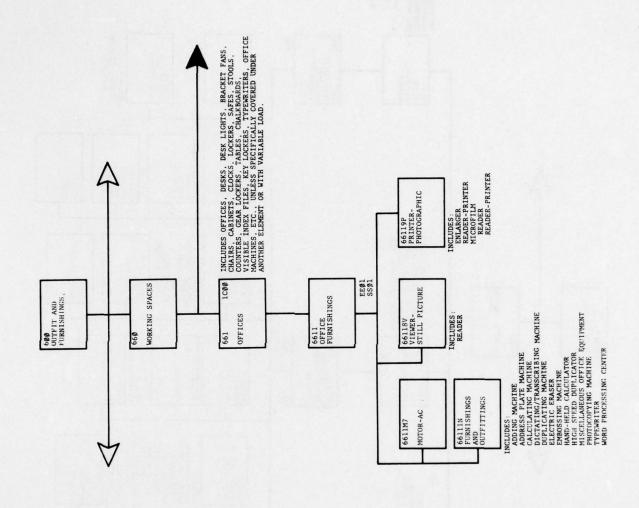


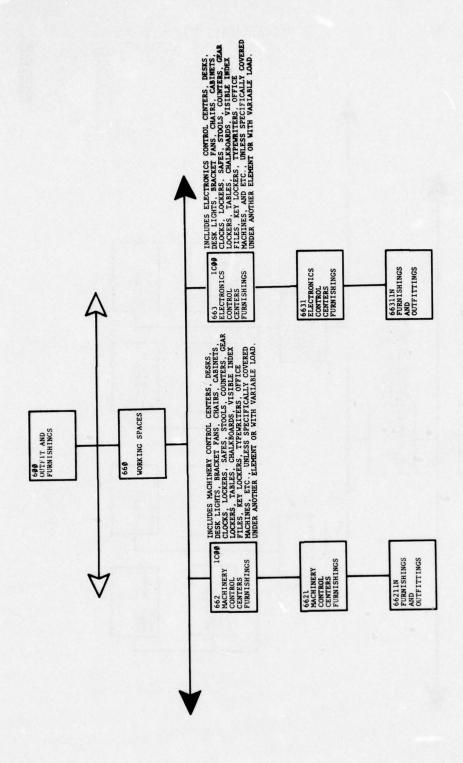
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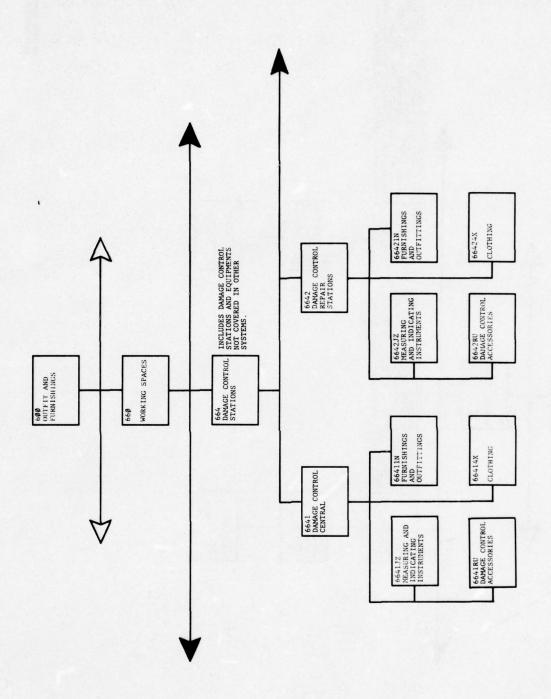


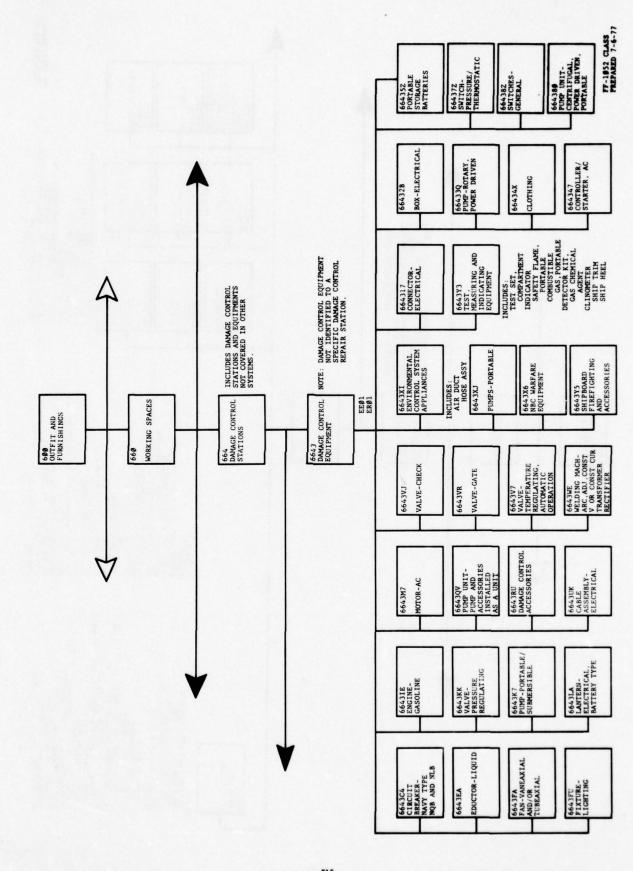


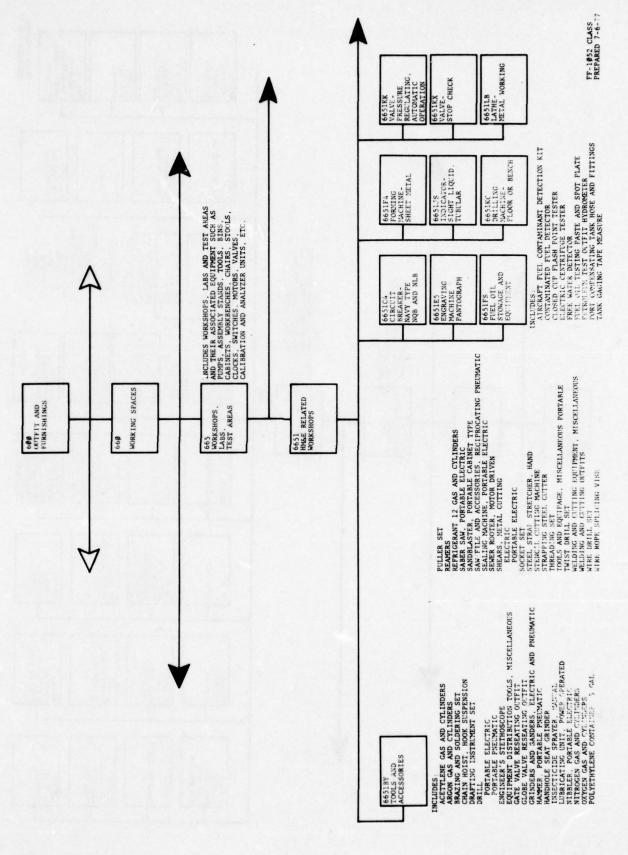


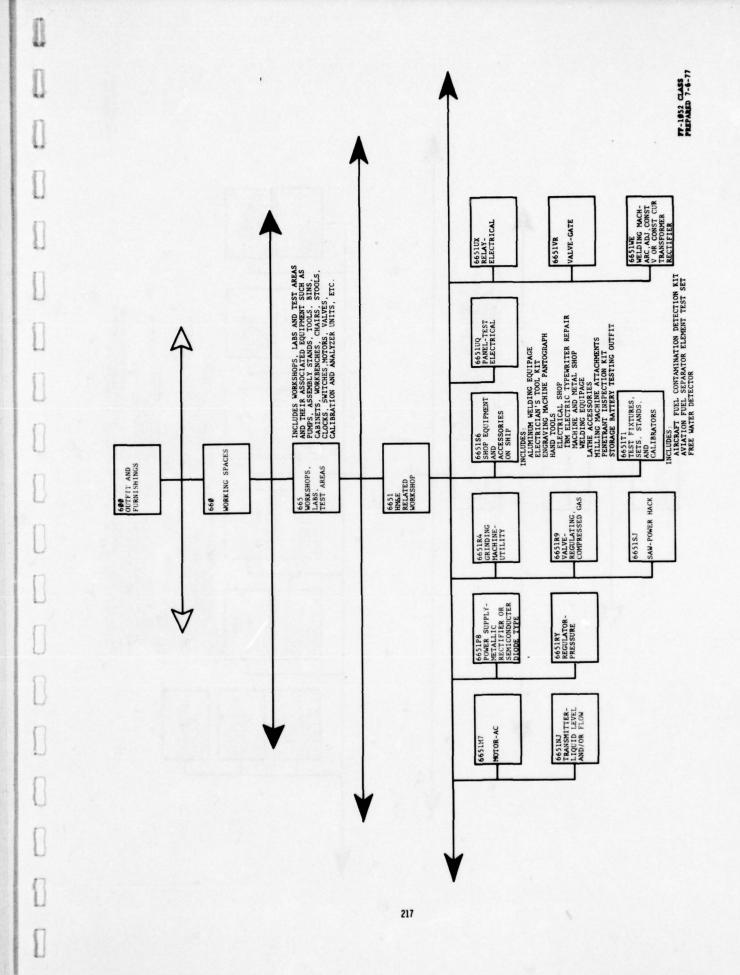


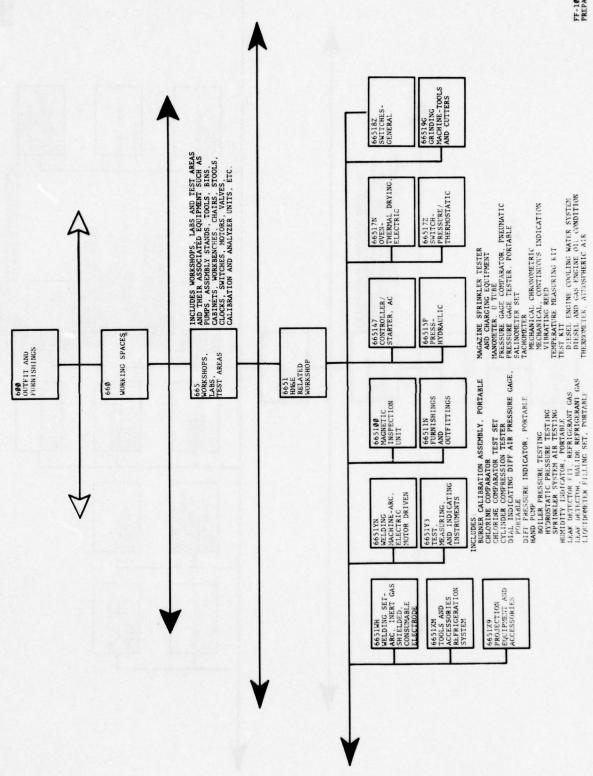
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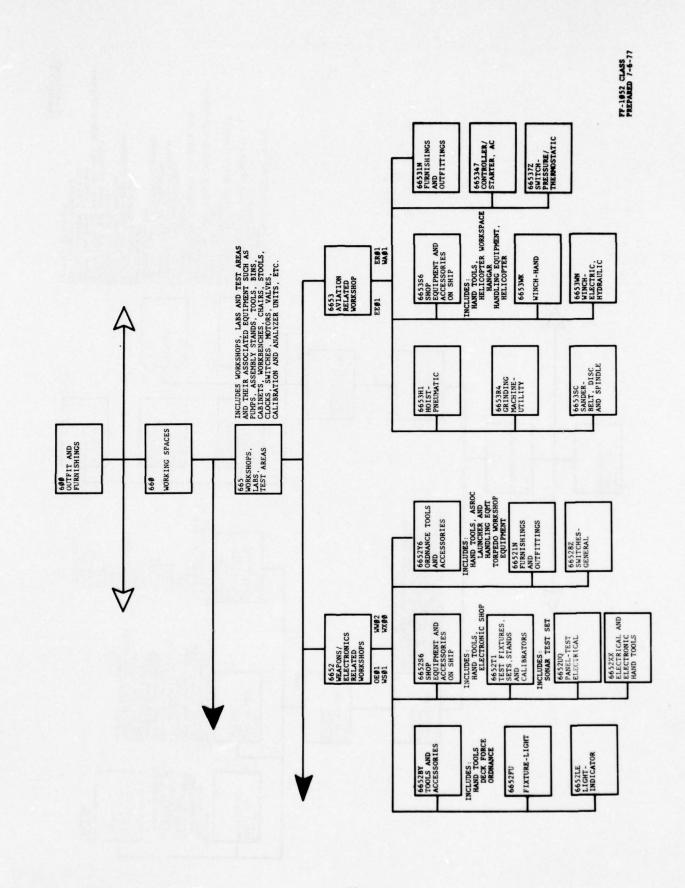




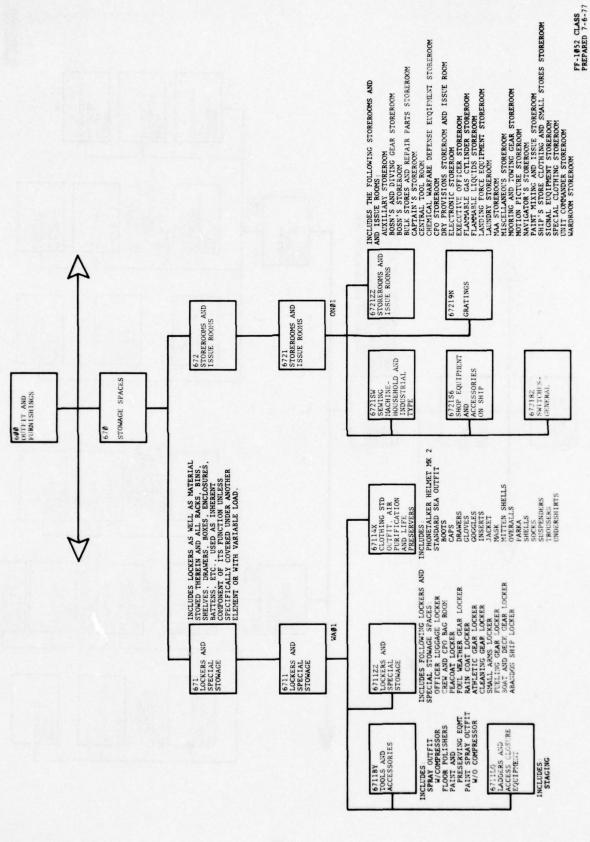




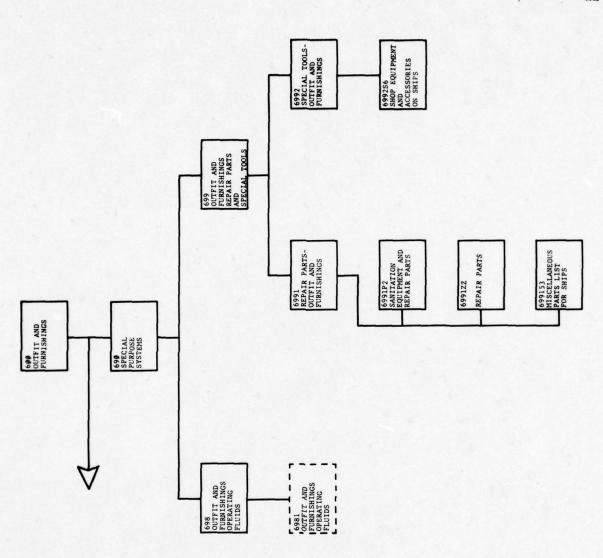
FF-1052 CLASS PREPARED 7-6-77

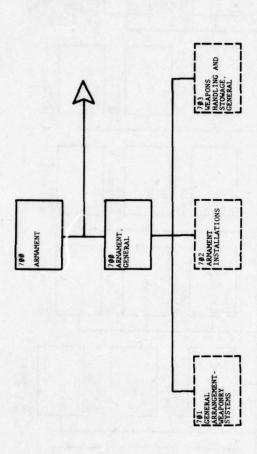


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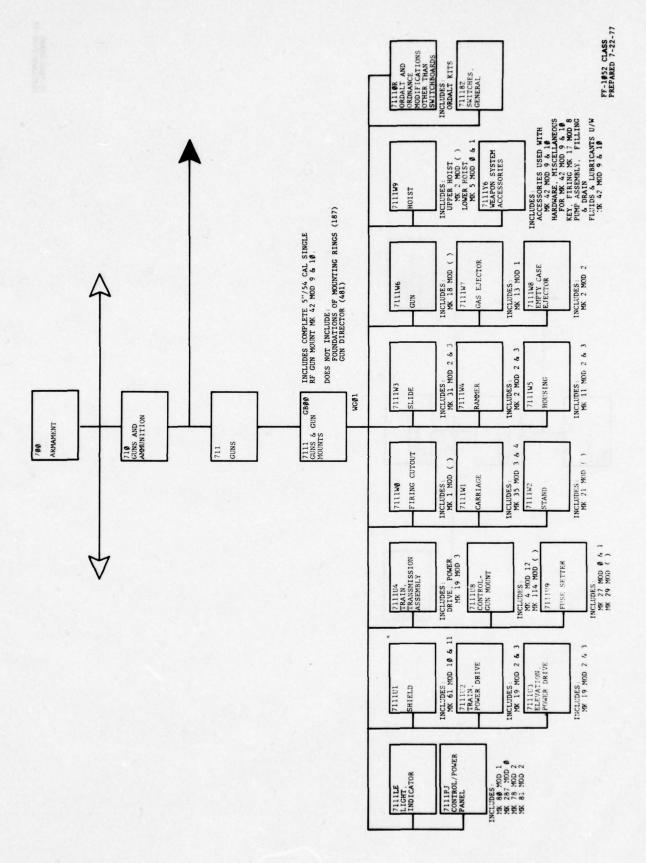


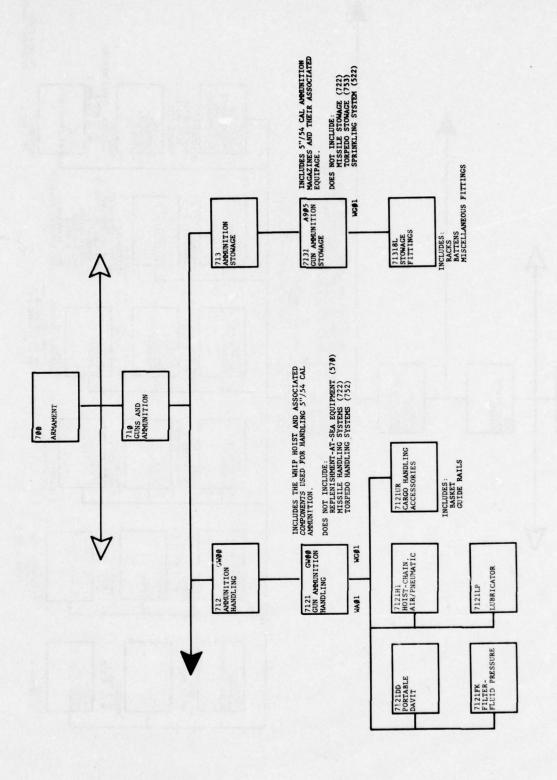




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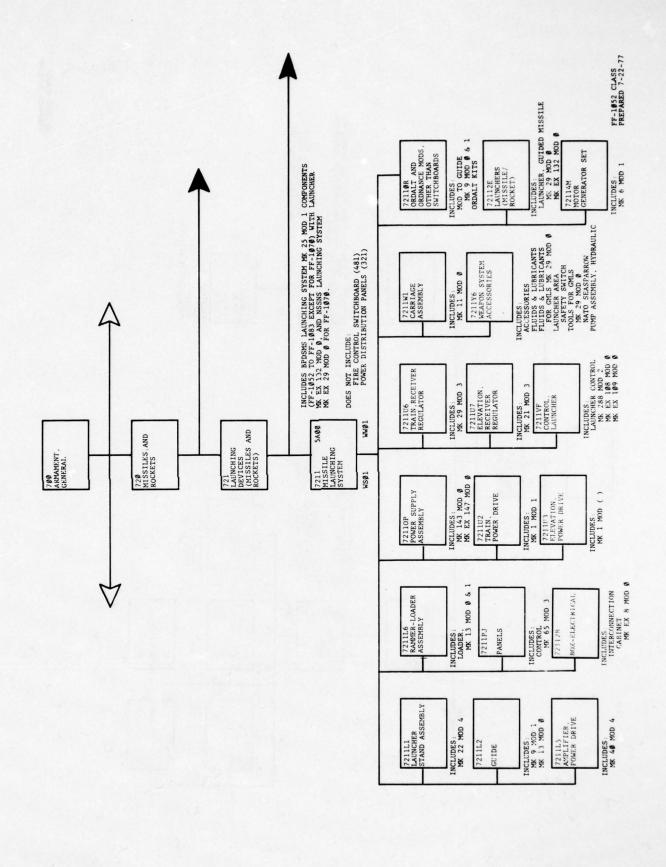
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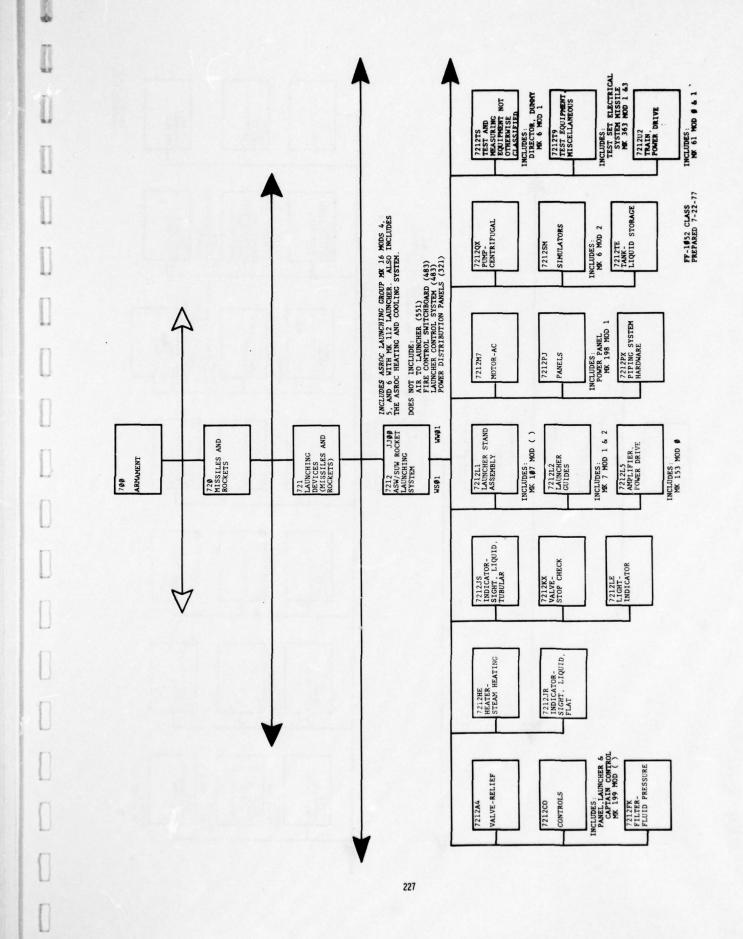


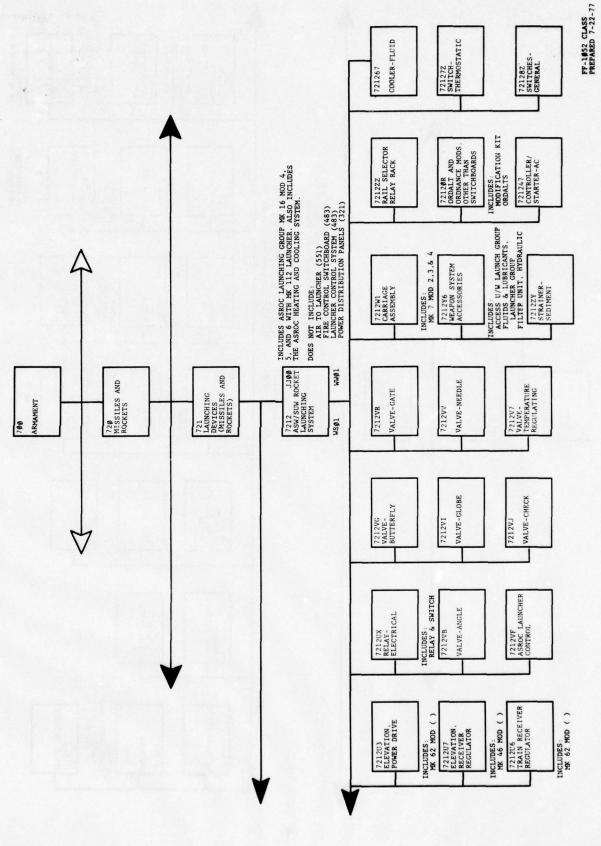


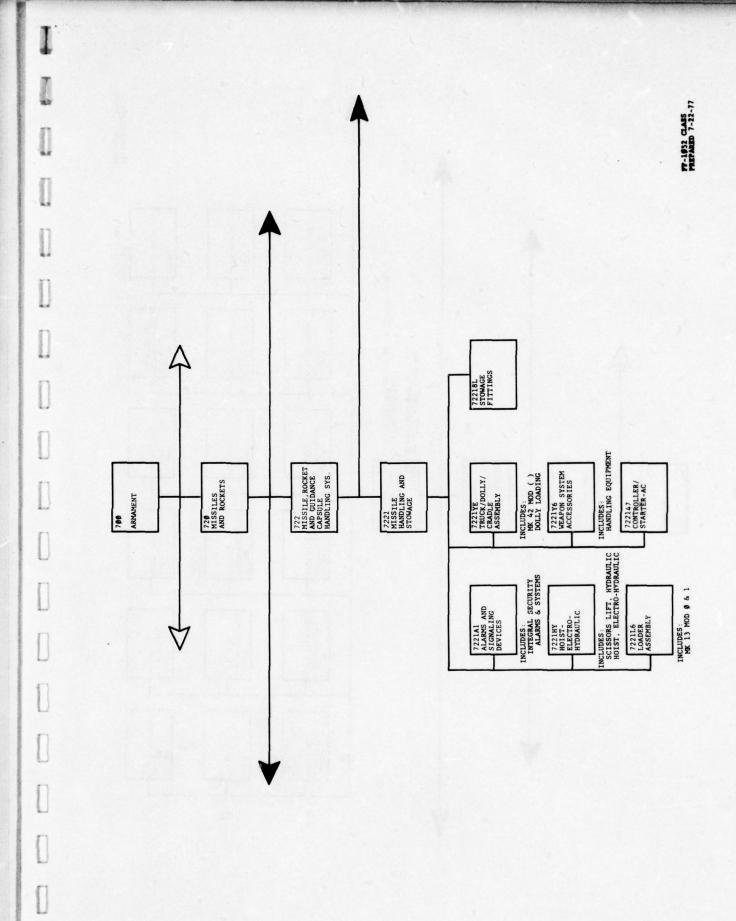
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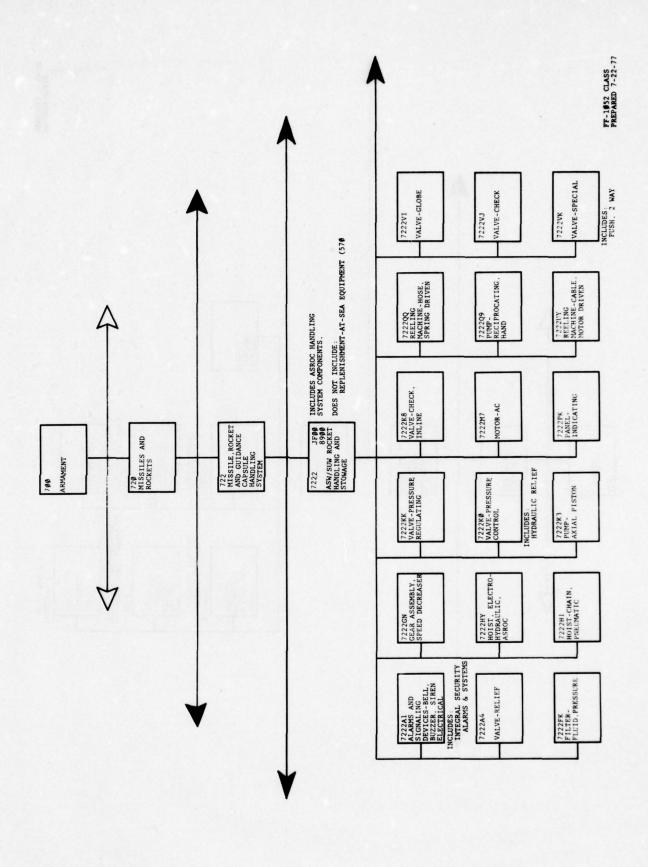
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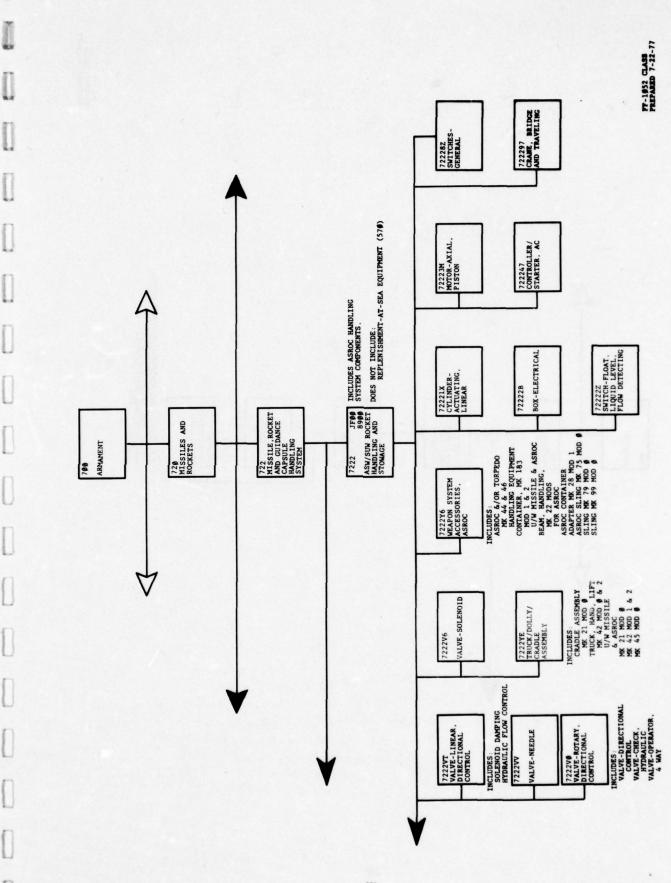


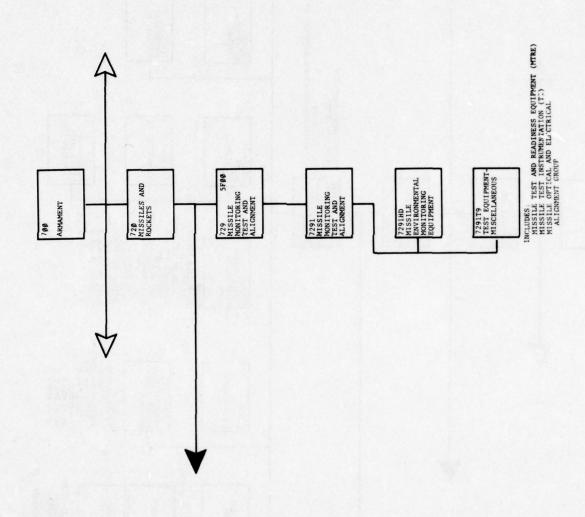


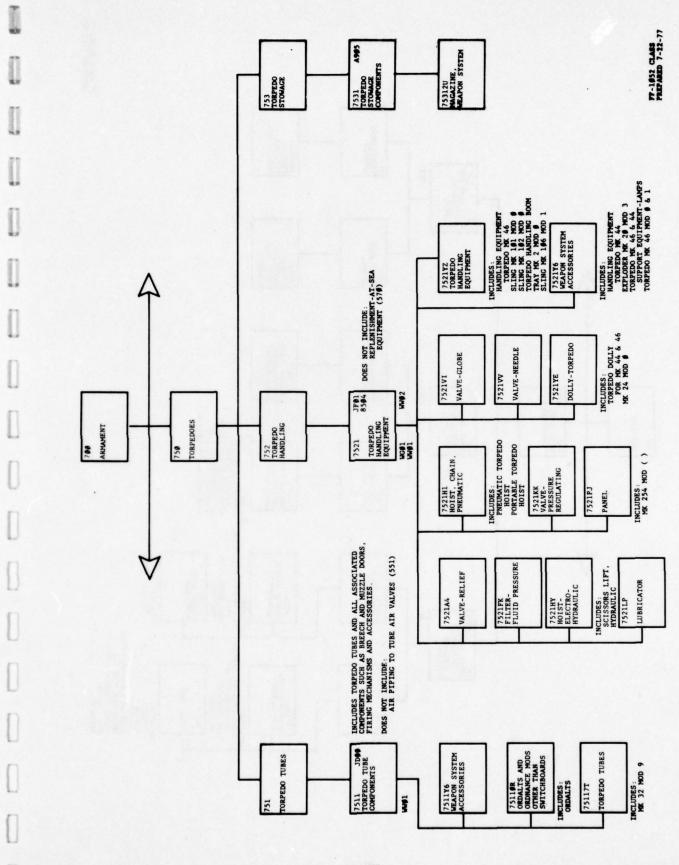


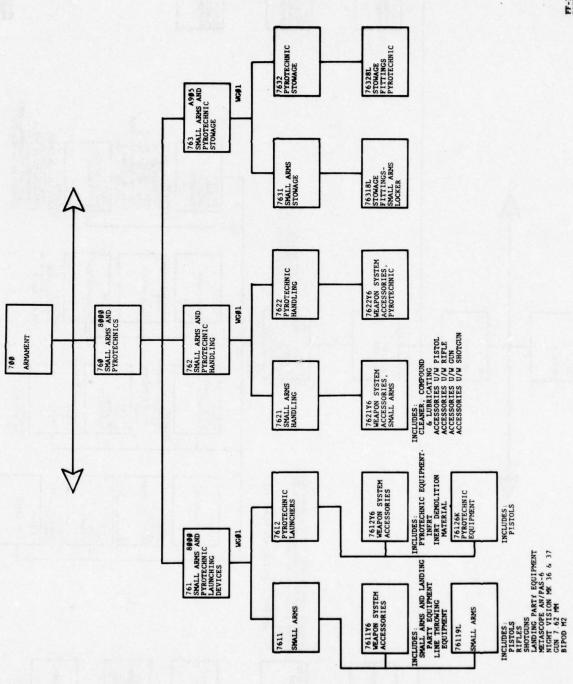


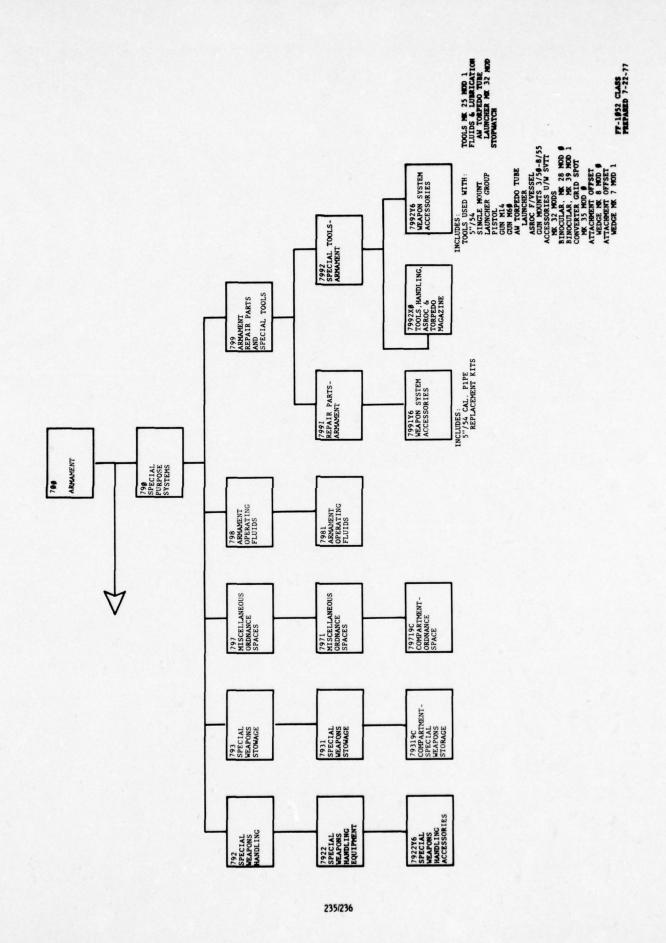


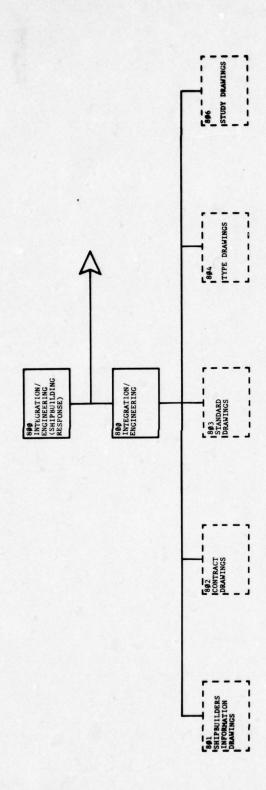






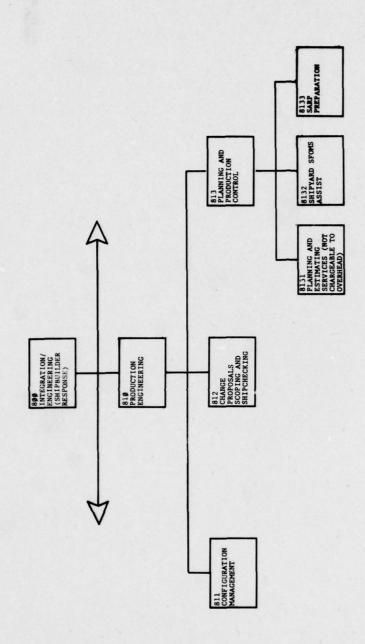


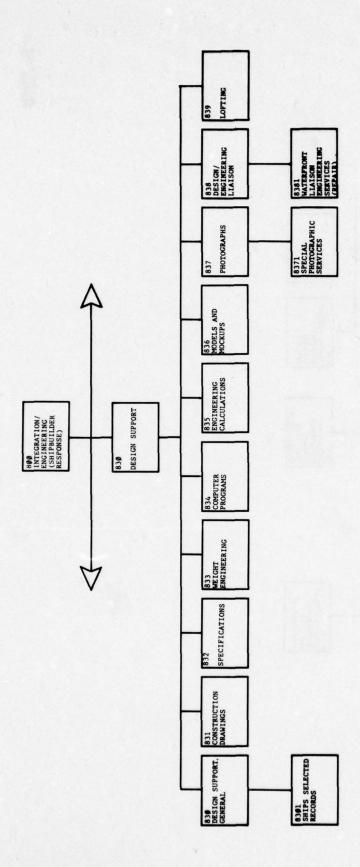




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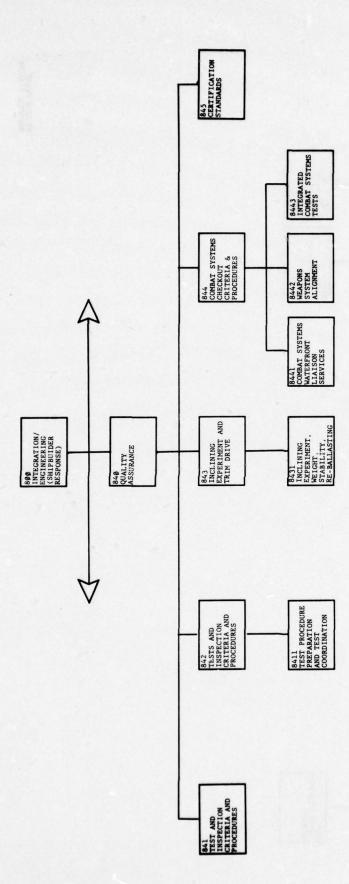


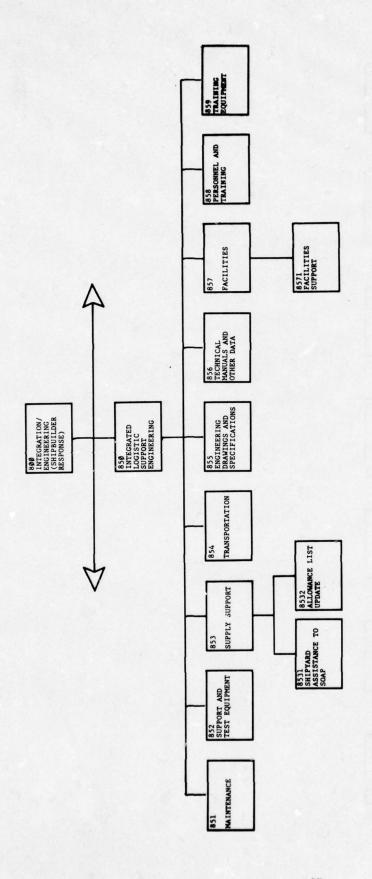


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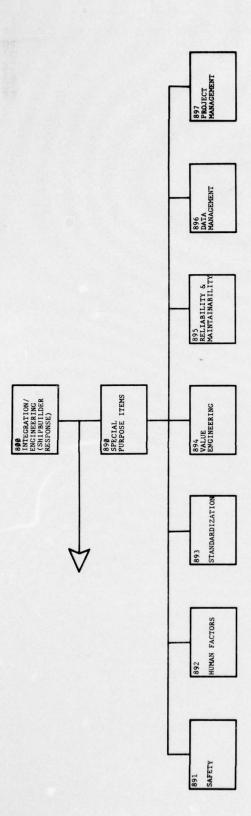


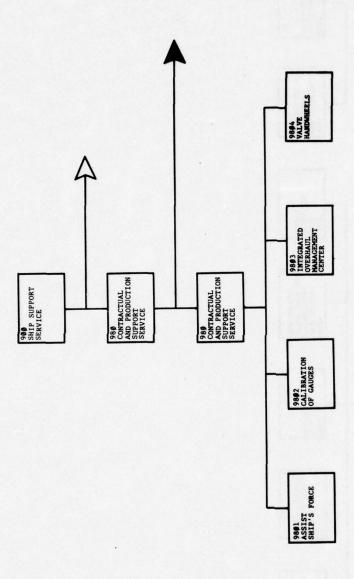




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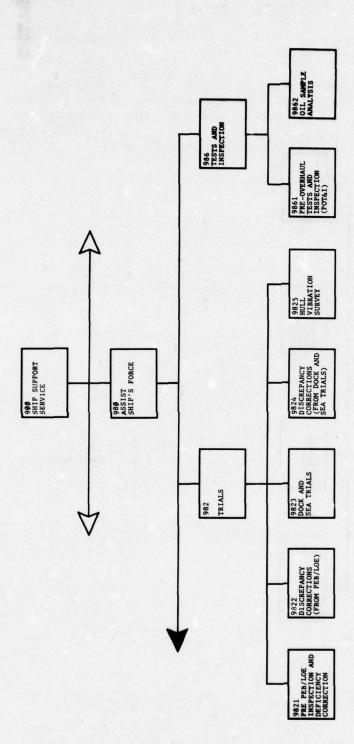


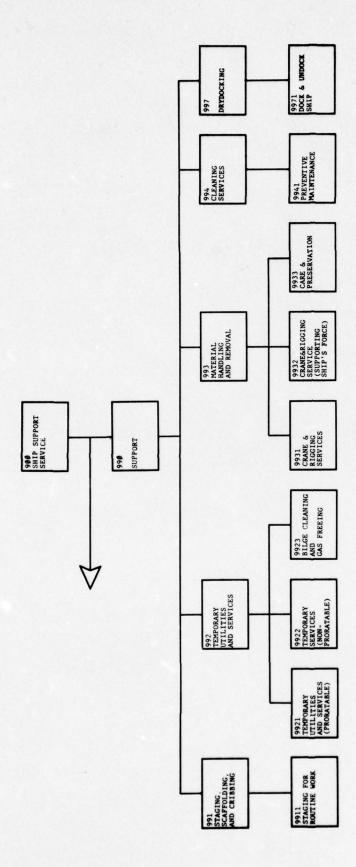


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APPENDIX A COMPONENT DICTIONARY CODE LIST

APPENDIX A

COMPONENT DICTIONARY CODE LIST

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CDC LAPL
  AA C92
            ABANDON SHIP ACCESSORIES AND LIFE BOATS
            SUPPORTS. ANTENNA (ELEX)
  AB AB-
  AC 94-003 ACOUSTIC DEVICE-SEE ALSO CONTROL ACOUSTIC DEVICE-MINESWEEPING
  AD 02-006 BOILFR-AUXILIARY. STEAM. WASTE HEAT
  AF 10-006 METER-ELECTRICAL INDICATING. AC AND CC METERS
  AF 52-013 ACTUATOR-HYDRAULIC SEE ALSO CYL-ACT LINEAR
  AG 61-265 ACTUATOR-PNEUMATIC & FLECTRO-PNEUMATIC
  AH 41-040 CUTTING MACHINE-DXYGEN ACETYLENE
  AT 31-009 CATHODIC PROTECTION EQUIPMENT
  AJ 61-273 ACTUATOR-ELECTRO MECHANICAL
  AK 85-008 ACAPTER-MISSILE HANDLING. CARGO HANCLING
  AL 41-122 AGITATOR-PAINT. SHAKER TYPE
  AM AM-
            AMPLIFIERS (ELEX/ORD)
  AN 33-002 AIR CONDITIONER
            NOT ASSIGNED
  AO
  AP 88-011 VALVE-TEMPERATURE REGULATING. STEAM CONTROL
  AQ 33-012 AIR CONCITIONER-WINDOW UNIT TYPE
  AR 09-001 CHARGER-BATTERY.AC
  AS 97-006 ANTENNA ASSEMBLY-BICONICAL OR STUB (FM&E/ELEX)
  AS AS-
            ANTENNAE-SIMPLE & COMPLEX (HM&E/ELEX)
  AT AT-
            ANTENNAE-SIMPLE (ELEX)
  AU 36-001 ALARMS & SIGNALING DEVICES-HORNS. SIRENS AND WHISTLES. AIR CR STEAM
  AV 41-006 CHARGER-MAGNET, PCRTABLE
  AW 36-005 ALARMS & SIGNALING DEVICES-WHISTLE. STEAM CR AIR
  AX 41-046 CENTERING MACHINE-SINGLE SPINDLE
  AY 03-001 COOLER-AIR
  AZ 83-001 SEAL-STERNTUBE. SUBMARINE APPLICATION
  AO 88-021 VALVE-BCILER BLOW
  A1 36-003 ALARMS & SIGNALING DEVICES-BELL.BUZZER. SIREN ELECTRICAL
  AZ 23-009 ALARMS & SIGNALING DEVICES-LIGHT. INCICATOR. ELECTRICAL
  A3 61-079 AMPLIFIER-MAGNETIC
  A4 88-023 VALVE-SAFETY RELIEF. INCLUDING VACUUM BREAKERS
  A5 61-082 AMPLIFIER-HYDRAULIC
            STEERING AND DIVING TOCLS AND REPAIR PARTS
  A6 822
  A7 823
            TOOLS AND EQUIPMENT CONS PLANT
  A8 23-006 ANNUNCIATOR-MECHANICAL DROP-AC
  A9 B24
            PERISCOPES - HOUSING FITTINGS
  8A BA-
            BATTERY-PRIMARY TYPE (ELEX)
  BB BB-
            BATTERY-SECONDARY TYPE (ELEX)
  BC C9-005 BATTERY-STORAGE
  BD 37-001 BEAPING ASSEMBLY-STERN TUBE & STRUT
  BE 41-001 BALANCING INSTRUMENT-PORTABLE
  BF 85-037 BALL. NUT. & SCREW ASSEMBLY
  BG C4-CC2 CONDENSER CHILLER-REFRIGERATION
  BH 37-011 BEARING ASSEMBLY-THRUST. PIVOTED SEGMENTAL. SINGLE OR DOUBLE
  BI 53-OCI CAPSTAN-SEE ALSO MOORING ACCESSORIES
            MEDICAL ECUIPMENT-PORTABLE
  BJ C37
  BK 93-011 BRAKE-PRCPULSION SHAFT (REGARDLESS OF PRIME MOVER)
  BL 37-013 BEARING ASSEMBLY-THRUST AND JOURNAL WITH RESONANCE CHGR
  BM C5-C23 COOLING UNIT-AIR TURBINE DRIVEN
  BN 37-005 BEARING ASSEMBLY-LINE SHAFT
  80
            NOT ASSIGNED
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CDC LAPL
  BP 25-042 BENCH MARK-CPTICAL
  DQ 41-097 BENDING MACHINE-POWER CPERATED
  BR $3-003 BLENCER-AVIATION FUEL
  BS C5-030 TURBOSUPERCHARGER-CENTRIFUGAL BOILER
  BT 05-031 TURBINE-GAS
  BU C2-OCI BOILER-MAIN PROPULSION. HP STEAM
  RV C2-005 BAILER-AUXILIARY. HOT WATER
  BW 64-017 FIRE EXTINGUISHER-PORTABLE
  BX 88-C27 VALVE-COMPRESSOR SHUT OFF
  BY C92
            TOCLS AND ACCESSCRIES
            ALARM UNITS (ELFX)
  BZ BZ-
             MINOR LANDING CRAFT AND SMALL BOATS (INCL ALL COMMCDITY CLASS 72)
  B1 43-024 BREAD SLICING MACHINE
  82 59-C17 BREATHING APPARATUS
  B3 89-OC1 BUOY-MESSENGER SEE ALSO UNDERWAY REPLEN ACC
  84 03-008 COOLFR-AIR
  85 30-001 BURNER-CIL. PRESSURE ATOMIZING. BCILER SERVICE
  86 30-002 BURNER-CIL. PRESSURE ATOMIZING. GUN TYPE
  B7 30-CC4 BURNER-CIL. VAPORIZING PCT
  B8 30-005 BURNER-CIL. RCTARY HORIZONTAL
  B9 30-007 BURNER-CATALYTIC
  CA CA-
            COMMUTATOR ASSEMBLY-SONAR (ELEX)
            CAPACITCE BANK (ELEX)
  CB CB-
  CC 32-C19 CABINET. ICE CREAM SEE ALSO REFRIGERATOR
  CD 28-005 CABINET. RESCLVER CONTROL-AUTOMATIC PLOTING
  CE 41-005 CABINET. BLAST CLEANING
  CF 85-038 CABLE MACHINERY-DECK
  CG CG-
            CABLE ASSEMBLY-RF (ELEX)
  CH C15
            GASOLINE AND JP - FUEL SYSTEMS TOOLS AND FITTINGS
  CI 43-027 CABINET. DOUGH PROOFING
  CJ 54-006 CAMERA-COPYING. LITHOGRAPHIC
  CK CK-
            CRYSTAL KITS (ELEX)
  CL 99-002 CARBON DICKIDE
  CM CM-
            COMPARATOR (ELEX)
  CN CN-
            COMPENSATOR (ELEX)
  CO C-
            CONTROLS (ELEX/ORD)
  CP CP-
            COMPUTER (ELEX/CRD)
  CO 85-042 CARRIAGE/CAR/CART/TRACTCR/TRAILOR
  CR CR-
            CRYSTALS (ELEX)
  CS 05-032 BASE/ENCLOSURE-GAS TURBINE
  CT 41-147 CARTON MACHINE
            COUPLER (ELEX)
  CU CU-
  CV CV-
            CONVERTER (ELEX/CRD)
            CONVERTER (ELEX/CRD)
  CV
            RADOMES (ELEX)
  CW CW-
  CX CX-
            CABLE ASSEMBLIES. NON RF (ELEX)
            CASES AND CABINETS (ELEX)
  CY CY-
  CZ 32-003 CHILLER-WATER
  CO 88-029 VALVE-REGULATING. WATER FLOW. FOR REFRIGERATION SYSTEMS
  C1 76-CC4 CHLOPINATOR
  C2 31-032 CHCCK-RCLLER. DECK AND STERN
 C3 14-001 CIRCUIT BREAKER-NAVY TYPE AOB AND AOBLE C4 14-002 CIRCUIT BREAKER-NAVY TYPE NOB AND NLE
  C5 14-003 CIRCUIT BREAKER-NAVY TYPE ACB
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C6 14-004 CIRCUIT BREAKER-NAVY TYPE ALB CT 14-006 CIRCUIT BREAKER-CTHER THAN AGB. NOB. ACB.ALB TYPES C8 41-148 CLEANING MACHINE-ALL TYPES EXCEPT BLAST CLNG CAB C9 99-006 CLOSER-DOOR HYDRAULIC DUMMY LCAD (ELEX) DA CA-DB 33-007 DAMPER-ACTUATOR AND POSITIONER DC 40-006 DAMPER-VENT. CCMBUSTION CONTROL DD 56-OC1 DAVITS. ALL TYPES DE 28-003 DEAD RECKONING ECUIPMENT DF 85-024 DEFLECTOR. JET PLAST NG 46-012 DEGAUSSING MAGNETIC MEASUREMENT SYSTEM DH 41-011 DEGREASER DI D-DISPENSER-CHAFF (ELEX) DJ 44-002 DEHUMIDIFIER-DESICCANT ELECTRIC DK 44-CC9 DEHUMIDIFIEP-SPACE. MECH REFRIG SELF CONTAINED DL 32-005 DEHYDRATCR-REFRIGERATION DM 44-001 DEHYDRATOR-FILTER, DESICCANT, HGH PRES AIR, SELF REAC DN 44-004 DEHYDRATOR-NON REACTIVATING nn NOT ASSIGNED DP C8-007 DEMINERALIZER-WATER. ION EXCHANGE DO 99-027 DESUPERHEATERS-ALL TYPES DR C6-2C5 COMPRESSOR UNIT-AIR DS 33-005 CAMPER-MECHANICAL EXHAUST VENTILATION SYS DT DT-DETECTING HEADS (ELEX) DU 54-021 DEVELOPING MACHINE-BLACK AND WHITE PRCCESS DV 43-001 DISH WASHING MACHINE DW 41-049 DISINTEGRATING MACH-METAL. ELEC ARC DX 32-014 DISPENSER-DRINKING WTR SEE ALSO DRNKG FTN(67-006) DYNAMOTORS (ELEX) DY CY-DZ 32-032 DISPENSER-MECHANICALLY REFRIGERATED, MILK DO C9-002 CHARGER-BATTERY. D.C. DI 41-146 DISPENSER-TAPE. ELECTRIC D2 32-031 DISPLAY CASE-MECH REF. SELF CONTND/NON-REFR D3 C6-CC2 COMPRESSCR-RECIPPOCATING D4 08-001 DISTILLATION UNIT D5 52-015 DESURGER-HYDRAULIC D6 32-027 DISPENSER-MECH REF.OTHR THN MLK SEE CAB.ICE CR/FREEZR D7 08-005 DISTILLATION UNIT-VAPER COMPRESSION D8 85-011 COLLY-BOATSTORAGE SEE ALSO TRK/DOLLY/CRADLE ASS D9 31-034 DOOR-ROLLER CURTAIN. SHIPBRD. HAND CR PWR CPER EA 74-001 EDUCTOR-LIQUID FB 49-001 CARBURETOR EC 73-010 EJECTOR-GARBAGE AND TRASH DISPOSAL ED C7-011 HEATER-FLUID EF 88-031 VALVE-BURBLER EF 73-012 EJECTOR-SIGNAL EG 73-001 EJECTCR ASSEMBLY-AIR EH E-HOISTS (ELEX) EI NOT ASSIGNED EJ 11-003 CONVERTER NITROGEN CHARGING ASSEMBLY EK 849 EL 59-OCI ELEVATOR-ELECTRO MECHANICAL EM 15-013 CONTROLLER-AC EN 16-010 GENERATOR-GAS EO NOT ASSIGNED EP 59-002 ELEVATOR-AIRCRAFT LIFTING

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EQ 41-050 EMBOSSING MACHINE-METAL & CROBRO ALSO OFF MACH ACC
ER 15-012 BENCH-LIQUID CXYGEN CONVERTER FILL
ES 66-001 ENGINE-DIESEL. SHIP PROPULSION AND SHIP'S SERVICE. 2 & 4 CYCLE
ET 22-022 SWITCHBCARD-MINESWEEPING
EU 89-037 VALVE-REFRIGERATION SHUT OFF. SMALLER THAN 3/4 IN
EV 66-CC5 ENGINF-CIESEL. 2 & 4 CYC. TYPE B
EW 16-014 BOOSTER-GAS
EX 66-CC6 ENGINE-DIESEL . NCN-MAGNETIC MINESWP PROP & AUX 4 CYC
EY 66-017 ENGINE-GASOLINE AIR CR FLUID COOLEC
EZ 18-007 MOTOR GENERATOR
EO 88-042 VALVE-FLCAT. LIQUID LEVEL CONTROL. REFRIGERATION SYSTEMS
E1 66-019 ENGINE-GASOLINE. BOAT PROP. DUTBOARD MOTOR
E2 66-020 ENGINE-STEAM.RECIPROCATING.MN PROP & AUX SERVICE
E3 88-C44 VALVE-STEAM SEAL MANIFCLD
E4 88-045 VALVE-GUARDING
E5 41-C51 ENGRAVING MACHINE PANTEGRAPH
E6 59-0C5 ESCALATCR
E7 C9-011 EXCHANGER. ICN
E8 93-001 EXPANSION JOINTS-PIPE. PACKLESS
E9 88-046 VALVE-TRIP THRCTTLE
FA 40-001 FAN-VANEAXIAL AND/OR TUBEAXIAL
FB 18-009 MOTOR GENERATOR
FC 40-002 FAN-CENTRIFUGAL
FD 20-002 RHEDSTAT
FE 40-003 FAN-CIRCULATING
FF 40-009 FAN-CENTRIFUGAL. CARBON DIOXIDE REMCVAL SYS
FG 99-030 FEEDRAIL-BRIDGE CRANE
FH 41-076 FILING MACHINE-SAW. BLADE
         BOILER FEEDWATER TEST AND TREATMENT
FI C56
FJ 09-010 FILLER-PORTABLE BATTERY WATER
FK 48-002 FILTER-FLUIC. PRESSURE
         FILTER UNITS (ELEX)
FL F-
FM 20-006 RHEOSTAT
         FURNITURE (ELEX)
FN FN-
FO
          NOT ASSIGNED
FP 88-048 VALVE-CROSSOVER AND MANIFOLD
FO 43-034 FILTER-CCCKING GREASE
FR FR-
         FREQUENCY MEASURING DEVICES (ELEX)
          FUEL OIL STOWAGE AND EQUIPMENT
FS C55
FT 31-023 FITTINGS-HULL SEE ALSO TOWING-ACC. MOORING ACC
FU 24-002 FIXTURE-LIGHTING
FV 48-CC6 FILTEP-AIR. WET CR DRY ELEMENTS
FW 76-0C3 FILTER-WATER PURIFICATION
FX 31-012 FLAME ARRESTER-VENTILATION
FY 54-015 FOLDING MACHINE-PAPER
FZ 43-012 GRINDERS AND CUTTERS-FOCD ELECTRICAL
FO 16-011 FURNANCE ASS CXY CANDLE ROUND AND SQUARE
F1 43-059 FOOD WARMER-RADIANT. OVERHEAD. ELECTRIC
F2 41-016 FORGE-OIL BURNING ELEC OR OTHER ALSC FURNACE
F3 41-053 FORGING MACHINE-HAMMER VERTICAL
F4 41-017 FORMING MACHINE-SHEET METAL
F5 54-0C4 FRAME PRINTING
F6 43-006 FRYERS-DEEP FAT. ELECTRIC
F7 85-046 FUEL DISPERSING SYS
F8 41-019 FURNANCE- ELECTRIC
F9 41-020 FURNANCE-OIL BURNING
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CDC LAPL 6A 45-003 GAGE-LIC ONTY MECHANICAL SEE ALSO INDICATOR AND METER GB 45-004 GAGE-LIGUID QUANTITY HYDRAULIC/PNEUMATIC GC 45-007 GAGF-PRESSURE GD 45-009 GAGE-DEPTH SURMARINE GF 43-002 GALLEY FOUIPMENT-ELECTRICAL . GF 43-CC9 GARBAGE DISPESAL MACHINE GG 31-005 GATE-STERN SEF ALSO DOCK OR HATCH GH G-GENERATOR-POWER (ELEX) GI 867 OPERATING GEAR MISCELLANEOUS REPAIR PARTS GJ 43-047 DOUGHNUT MACHINE-CUTTING AND FRYING GK 69-028 GEAR-TURNING/JACK DEVICE GL 69-329 GEAR-TILTING GM 69-006 GEAR ASSEMBLY-SPEED DECREASER. MAIN PRCP SERVICE GN 69-016 GEAR ASSEMBLY-SPEED DECREASER. AUX SERVICE GONIOMETERS (ELEX) GO GO-GROUND RCDS (ELEX) GP GP-GO 851 SOILER FEEDWATER SYSTEM CONTROL FITTINGS GR 23-008 SEMAPHORE-MECHANICAL SIGNAL GS 43-044 GALLEY UNITS-COMPACT GT 16-006 GENERATER-DC CR AC GU 24-004 FIXTURE-LIGHTING FLUCRESCENT GV 24-006 FIXTURE-LIGHTING MERCURY VAPOR GW 16-CCB GENERATOR-SMCKE. MECHANICAL GX 16-009 GENERATOR-DXYGEN/NITROGEN GY 16-001 GENERATOR-BATTERY CHARGING GZ 70-001 GOVERNOR-MECHANICAL FUEL GELLING UNIT MIG - 10 GO G1 70-005 GOVERNOR-HYDRAULIC G2 88-072 GCVERNCO-PUMP G3 70-013 GOVERNOR-ELECTRO HYDRAULIC G4 70-014 GOVERNOR-ELECTRIC G5 23-004 SEARCHLIGHT-SIGNAL G6 41-057 GRINDING MACHINE-CYCLINDRICAL G7 41-060 GRINDING MACHINE-GLASS G8 41-063 GRINDING MACHINE-VALVE G9 41-065 GRINDING MACHINE-SURFACE, RECIPROCATING HA 85-031 HANDLING GEAR-GUIDANCE CAPSULE HB 85-045 HANGAR-AIRCRAFT HC HC-HOLDER. CRYSTAL (ELEX) HD H7-ENVIRONMENTAL APPARATUS (ELEX) HE C7-002 HEATER-FLUID. FUEL OIL AND LUBE OIL. STEAM HEATED HE CT-003 HEATER-WATER AND AIR HG 26-015 PROJECTOR-MOTION PICTURE, SOUND, SUPER 8MM HH 07-004 HEATER-WATER. STM/HT WTR HTD. INST. STM WTR CVTR HI 07-001 HEATER-FLUID. SEA WATER. STEAM HEATED HJ 07-005 HEATER-FLD. DEAERATING. BOILER FOWTR. TYPES I & II HK C7-006 HEATER-IMMERSION. ELECTRIC

HL 07-CC7 HEATER-SPACE ELEC. TYP D RADIANT. TYPE T TUR. RAD PANL

HM 26-016 PROJECTOR-MOTION PICTURE. SOUND. SUPER 16MM

HP 07-016 HEATER-CCOLANT ENGINE. OIL FIRED OR ELECTRIC HO 07-022 HEATER-VENTILATION . VENT DUCT. ELEC. TYP 51-61

HT 07-017 HEATER-AIR CIRCULATING UNIT. STEAM CR HT WTR HTD

HN 07-013 HEATER-WTR. ELECTRIC STORAGE TYPE

HR 07-023 HEATER-SPACE ELECTRIC. BLOWER. TYPE B HEAD. HAND. AND CHEST SETS (ELEX)

NOT ASSIGNED

HO

HS H-

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HU 07-045 HEATING ELEMENTS-ELEMENTS-ELECTRICAL
HV 07-036 HEATING UNIT-ELEC. CONTRLD TEMP FOR STRSS RELF PRHTG
HW 58-OC1 HOIST-WIREROPE ELECTRIC
HX 58-002 HOIST-MANUAL
HY 58-003 HOIST-ELECTRO HYDRAULIC & ELECTRO-MECHANICAL
HZ 58-004 HOIST-CHAIN ELECTRIC
HO 61-116 HYDROSTAT. CCNTRCL
HI 58-005 HOIST-PREUMATIC
H2 58-0C6 HOIST-HYDRAULIC
H3 85-025 HOIST-WINDSCREEN
H4 87-009 HOIST-RODMETER. U/W LOG
H5 52-033 HOIST ASSEMBLY-CYL & RAM TYP FOR COMMUN MAST
H6 41-069 HONING MACHINE-HERIZONTAL OR VERTICAL
H7 33-010 HUMIDIFIER
H8 52-016 HYDRAULIC MECHANISM SEE ALSO MISSLE HNDG SYS-HYD
H9 31-033 HYDROFOIL ASSEMBLY
IA 64-018 FIRE EXTINGUISHING SYSTEM
18 66-002 ENGINE-DIESEL. TWO CYCLE
IC 865
          IC COMMUNICATION EQUIPMENT
ID ID-
          INDICATOR-NON CATHODE RAY TUBE (ELEX/CRD)
IE 66-018 FNGINE-GASOLINE
IF 66-021 ENGINE-CIESEL. NCNMAGNETIC
IG 66-022 ENGINE-DIESEL. MCDEL 645
IH 69-026 GEAR ASSEMBLY-SPEED INCREASER
II 71-001 DISTRIBUTOR-IGNITION SYSTEM
IJ 73-011 EJECTCR-SEWAGE
IK 78-018 COUPLING ASSEMBLY
IL IL-
          INSULATORS (ELEX)
IM IM-
          INTENSITY MEASURING DEVICES (ELEX)
IN 79-003 MUFFLER-DRY
          NOT ASSIGNED
10
IP IP-
          INDICATORS-CATHOCE RAY TUBE (ELEX)
10 83-015 CONTPOL BOARC-CONTROLLABLE PITCH PROPELLER. EMER. PITCH CONTROL
TR 91-004 LAUNDRY PRESS-COMMERCIAL
         AIR CONDITIONING REFRIGERATION TOOLS AND ACCESSORIES
IS 859
IT 92-020 TANK-LUBE DIL STCRAGE AND CONDITIONING ASSEMBLY
IU 94-004 ACOUSTIC DEVICE
IV 94-005 ACOUSTIC DEVICE
IW
          NOT ASSIGNED
IX 97-012 SUB ASSEMBLIES-PERISCOPE
IY 97-018 CAMERA ACCESSCRIES-PERISCOPE
IZ 99-029 RECEIVER-FUELING PROBE
          NOT ASSIGNED
TO
          NOT ASSIGNED
11
12 864
          NAVIGATIONAL SIGNAL LIGHTS
          NOT ASSIGNED
13
          NOT ASSIGNED
14
          NOT ASSIGNED
15
          NOT ASSIGNED
16
          NOT ASSIGNED
17
18
          NOT ASSIGNED
          NOT ASSIGNED
19
JA 43-028 ICE CREAM CUP FILLING MACHINE- HAND CPERATED
JB 32-017 ICE CREAM FREEZER-PWR OPER WITH INTGRL MCH REF EQ
JC 32-022 ICE MAKING MACHINE-MECH REFRIG SELF CONTAINED
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KW 92-001 TANK-STCRAGE

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JD J-
          INTERFACE UNITS (ELEX)
JE 32-004 ICE MAKING PLANT
JF 41-032 IMPREGNATING FCUIPMENT
JG 30-006 INCINERATOR SEE ALSO BURNER
JH 27-008 SALINITY INDICATING EQUIPMENT
JI
          NOT ASSIGNED
JJ 38-002 INDICATOR-TEMPERATURE. ELECTRICAL
JK 28-028 NAVIGATION EQUIPMENT
JL 38-GOT INDICATOR-BOILER SMOKE
JM 38-014 INDICATOR-SALINITY & SALINITY CELL
JN 38-015 INDICATOR-PRES DIFFERTL. LIQ/STM LVL. DIR OR REM
10
          NOT ASSIGNED
JP 38-015 INDICATOR-MECHANICAL TACHOMETER
JO 36-020 INDICATOR-LIO LVL. FLOW. WATER AND FUEL
JR 45-001 INDICATOR-SIGHT LIQUID. FLAT
JS 45-002 INDICATOR-SIGHT LIQUID. TUBULAR
JT 45-005 INDICATOR-METER. DIFFERENTIAL PRESSURE
JU 61-025 INDICATOR-PERTABLE SHIP CONTROL
JV 41-111 VULCANIZER - PLBBER COVERED CABLE
JW 29-001 INJECTOR- FUFL DIESEL ENGINE NOZZLE NON-MET TYP
JX 29-002 INJECTOR-FUEL. DIESEL ENGINE. UNIT METERING AND PRES
JY 43-060 INJECTOR-RINSE AGENT FOR DISHWASHING MACHINE
          MEASURING AND INDICATING INSTRUMENTS
JZ 887
JO 31-011 TENSION UNIT-HYDRAULIC RAM
J1 27-009 INTERCOMMUNICATION STATION
J2 97-002 MAST-ANTENNA
J3 97-013 MAST-SNORKEL
          NUCLEAR POWER PLANT - COCLANT DISCHARGE SYSTEM VALVE
J4 589
J5 85-035 JACK ASSEMBLY-HAND. SCREW. HYDRAULIC/PNEUMATIC OPR
J6 41-034 JOINTER-WCODWCRKING
J7 27-010 TELEPHONE EQUIPMENT-DIAL
J8 43-008 KETTLE-STEAM JACKETED
J9 41-070 KFY DUPLICATING MACHINE
KA 40-004 DRIER-HAND. FLECTRIC
KB 86-003 DRIER-PHCTOGRAPHIC
KC 41-014 DRILLING MACHINE-FLOOR OR BENCH
KD 43-050 TABLE-FOCD WARMER . ELECTRIC/STEAM HEATED
KE 54-014 DRILLING MACHINE-PAPER
KF 67-006 DRINKING FOUNTAIN
KG 52-001 DRIVE ASSEMBLY-ELECTRO HYDRAULIC AMMUN HOIST
KH 52-004 DRIVE ASSEMBLY-ELECTRO HYD HST. VERT TUB.. 12.75RKT
KI 16-005 TACHOMETER SEE ALSO INDICATOR-MECHANIC TACHOMETER
KJ 52-007 DRIVE ASSEMBLY-ELECTROHYDRAULIC HOIST.3000# MIS TRAV
KK 88-063 VALVE-PRESSURE REGULATING
KL 85-004 DRIVE ASSEMBLY-SLIDING BLOCK
KM 91-008 DRY CLEANING PRESS
KN 91-007 DRY CLEANING UNIT ASS-AUTO.SYNTHET SCLVENT TYPE
          NOT ASSIGNED
KO
KP 54-018 DRYING MACHINE BLUEPRINT
KO 91-002 DRYING TUMBLER-LAUNDRY
KR 59-003 DUMB WALTER
KS 54-002 DUPLICATING MACHINE-OFFSET SEE ALSO CFF MACH ACC
KT 41-015 DYNAMOMETER
KU 41-131 TANK-HOT DIP
KV 92-005 TANK-DIESEL ENGINE. AIR STARTING
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KX 83-104 VALVE-STOP CHECK
KY KY-
          KEYING DEVICES (ELEX)
KZ 88-117 VALVE SURPLATE
KO 88-125 VALVE-PRESSURE CONTROL
K1 88-129 VALVE-PRESSURF REGULATING
K2 88-130 VALVE-HYDRAULIC CONTROL
K3 01-010 PUMP. ROTARY PISTON. FIXED OR VARIABLE CELIVERY
K4 88-134 VALVE-SHUTTLE
K5 88-135 VALVE-HYDRAULIC
K6 88-138 VALVE-CHECK. INLINE. UNDER $25.00
K7 01-025 PUMP. PCRTABLE SUBMERSIBLE
K8 88-142 VALVE-CHECK. INLINE. $25.00 AND ABOVE
K9 88-158 VALVE-TEST CASTING
LA 24-009 LANTERN-ELECTRIC. BATTERY TYPE
LB 41-036 LATHE-METAL WORKING
LC LC-
          TOOLS-LINE CONSTRUCTION (ELEX)
LD 91-012 LAUNDRY EQUIPMENT
LF 23-002 LIGHT-INDICATOR
LF 24-008 LIGHT-NAVIGATIONAL MARINE
LG 54-024 LIGHT-ARC PHCTCL ITHOGRAPHIC
LH 16-015 LIQUIDIFIED GAS STORAGE AND CHARGING SYS
LI
          NOT ASSIGNED
LJ 54-GC7 LITHCGRAPHIC. NEGATIVE AND PLATE MAKING
LK 99-020 LOCK-ELECTROMECHANICAL
LL 28-018 LCCKER-BINOCULAR DRYING
LM 26-013 LOUDSPEAKER-MOTION PICTURE PROJECTOR
LN 65-001 LUBRICATOR-MECHANICALLY OR HAND OPERATED
          NOT ASSIGNED
10
LP 65-002 LUBRICATCR-AIR OPERATED
          LADDERS AND ACCESS CLCSURE EQUIPMENT
LO C16
          LUBE OIL PIPING SYSTEM REPAIR PARTS
LR 845
          LOUDSPEAKERS (ELEX)
LS LS-
LT 41-037 LATHE-WCCDWORKING
LU 88-159 VALVE-DISTRIBUTOR LUBRICATION
LV 41-141 UNDERCUTTER - ARMATURE. MICA. ELECTRICAL OPERATED
          UNDERWAY REPLENISHMENT TOOLS AND ACCESSCRIES
LW C20
LX 32-008 UNION TUBE - REFRIGERATION
LY 43-005 UPNS -COFFEE
LZ 89-162 VALVE-SHEARING
LO 88-169 VALVE-LINE BLIND
          LAUNCHER STAND-WEAPON SYSTEM
LI
          LAUNCHER GUIDES-WEAPON SYSTEM
LZ
          TRAIN ASSEMBLY-WEAPON SYSTEM
L3
          ELFVATION ASSEMBLY-WEAPON SYSTEM
L4
          AMPLIFIER . POWER CRIVE-WEAPON SYSTEM
L5
          RAMMER-LCADER ASSEMBLY-WEAPON SYSTEM
16
L7 88-170 VALVE AND TRAP MANIFOLD
L8 88-177 VALVE-SPECIAL STCP CHECK
L9 88-186 VALVE-FLCW FUSE
          MAGAZINE-MAGNETIC TAPE OR WIRE (ELEX)
MA MA-
MB 68-001 MAGNETO-IGNITION
MC 32-006 MANIFOLD-REFRIGERATION
          MODULATORS. DEMOCULATORS. AND DISCRIMINATORS (ELEX)
MD MD-
ME ME-
          METERS (ELEX)
          MAGNETS CR MAGNETIC FIELD GENERATORS (ELEX)
MF MF-
MG 45-008 MANOMETER-U TUBE AND OTHER TYPES
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CDC LAPL MH 91-136 MARKING MACHINE-LAUNDRY MI K-MICROPHONES (ELEX) MJ 85-030 MAST-HINGED MK MK-MISCELLANFOUS KITS (ELEX) ML ML-METECROLOGICAL DEVICES (ELEX) MM 43-016 MEAT SLICING MACH-ELEC & MANUAL SEE ALSO FOOD CUTTER MN 43-021 MEAT TENDERIZER-ELECTRIC MO NOT ASSIGNED MP 10-001 METER-VOLUMETRIC. POS DISPLIFUEL CILIMTRIGASIJP-5.AL T MO 10-002 METER-FLOWRATE INDICATING. FLOAT TYPE RCTAMETER MR 10-003 METER-IMPELLER TYPE LICUID VELOCITY MS 10-004 METER-VENTURI TYPE MT MT-MOUNTINGS (ELEX) MU MU-MEMORY UNITS (ELEX) MV 41-042 MILLING MACHINE-HORIZONTAL MW 41-043 MILLING MACHINE-WCCDWORKING. VERTICAL. BCRING MX MX-MISCELLANEOUS EQUIPMENT (ELEX) MY 41-038 MIXER-LIQUID. PORTABLE MZ 43-004 MIXING MACHINE-ELECTRIC. FOOD AND FLUID MO 28-031 SEXTANT, MARINE M1 43-035 MOLDING MACHINES-MEAT. FISH M2 C26 ANCHORING AND MOCRING APPLIANCES M3 41-088 MORTISER-HOLLOW CHISEL M4 17-023 MOTOR-AC/DC 0.25 HORSEPOWER AND SMALLER M5 31-039 SONAR DOME WINDOW SYSTEM M6 10-005 METER-FLOWRATE INDICATING. VANE TYPE M7 17-001 MOTOR-AC OR DC M8 31-040 TENSIONING DEVICE-TORS ON BAR MISCELLANFOUS FLAG ALLOWANCES. OFFICE MACHINES M9 532 NA 32-021 CARBONATOR-SCDA FOUNTAIN NB 13-013 TRANSFORMERS-REPAIRABLE AND NON-REPAIRABLE NC 32-025 ICE CREAM FREEZER ND 33-004 CHILLER-WATER. AIR CONDITIONING NE 61-080 AMPLIFIER-ELECTRONIC NF 52-005 TRANSMISSION-HYDRAULIC.FIXED OR VARIABLE DELIVERY SEE ALSO POWER UNIT NG 69-011 TRANSMISSION-MECHANICAL NH 27-005 TRANSMITTER-MECHANICAL NI NOT ASSIGNED NJ 27-006 TXMTP-LIG LVL ANC/OR FLOW.CAP.FLOAT.IND.RADICACT.RES AND SONIC TYPE NK 27-021 TPANSMITTER-LIQUID LEVEL. FLECTRICAL NL 28-024 TRANSMITTER-NAVIGATIONAL NM 61-085 TRANSMITTER-TEMPERATURE SEE ALSO INDICATOR - TEMPERATURE. ELEC RESIST NN 27-CC1 TRANSMITTER/INDICATOR-ELECTRICAL TRANSMITTER TYPES NOT ASSIGNED NO NP 54-022 PRINTING MACHINE-BLUEPRINT NO 85-043 STAND-MISSILE NR 88-192 VALVE-PRESSURE REGULATING. HIGH PRESSURE AIR STEEL PLATE NS NT 88-193 VALVE-FLCW CONTROL NU 88-201 VALVE-OFFICE NV 77-001 TRAP-STEAM AND/OR AIR NW 37-016 BEARING-JOURNAL. PIVOTED PAD/SHOE NX 38-021 INDICATING SYSTEM-LIQUID LEVEL. PNEUMATIC NY 41-002 BALANCING MACHINE-DYNAMIC. STATIC. HCRIZONTAL NZ 41-031 MACHINE-HOSE ASSEMBLY. REPAIR AND CUTCFF

NO 93-004 NOZZLE-PRESSURE FUEL SERVICING

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NA C24
          NAVIGATION EQUIPMENT AND ACCESSORIES
M2 28-027 NAVIGATION EQUIPMENT-PLOTTING SYS SEE ALSO PLTG TABLE
N3 28-026 NAVIGATION ECUIPMENT-DEAD RECKONING ECUIPMENT
N4 28-001 NAVIGATION PLCTTING BOARDS
N5 28-011 NAVIGATIONAL CLOCKS
N6 31-041 DOOR-HINGED-HAND OPERATED
N7 64-001 NOZZLE-FIRE HOSE SEE ALSO DAMAGE CONTROL ACC
N8 64-CC3 NOZZLE-MCNITCR TYPE
NO 64-004 NOZZLE-WATER QUENCH
         MISCELLANEOUS GROUPS (ELEX)
CA OA-
          MULTIPLEXER AND/CR DEMULTIPLEXER GRCUPS (ELEX)
08 08-
00 00-
          OCEANOGRAPHIC DEVICES (ELEX)
00 00-
         INDICATOR GROUPS (ELEX/CRD)
DE DE-
          ANTENNA GROUPS (ELEX)
OF OF-
          ADAPTER GROUPS (FLEX)
0G 0G-
          AMPLIFIER GRCUPS (ELEX)
OH OH-
          SIMULATOR GROUPS (ELEX)
C1 C-
          OSCILLATORS (ELEX)
          CONSCLES AND CONSOLE GROUPS (ELEX/CRC)
01 01-
OK OK-
          CONTROL GROUPS (ELEX/ORD)
          DATA ANALYSIS AND DATA PROCESSING (ELEX)
OL OL-
          MODULATOR ANC/CR CEMODULATOR GROUPS (ELEX)
OM OM-
          INTERCONNECTING GROUPS (ELEX)
ON ON-
00
          NOT ASSIGNED
OP OP-
          POWER SUPPLY GROUPS (ELEX/ORD)
00 00-
          TEST SET GROUPS (ELEX)
          RECFIVER GROUPS (ELEX)
CR OR-
          OSCILLOSCOPE-TEST (ELEX)
OS OS-
          TRANSMITTER GRCUPS (ELEX)
OT GT-
          CONVERTER GRCUPS (ELEX)
OU OU-
          GENERATOR GROUPS (ELEX)
OV OV-
OW CW-
          TERMINAL GROUPS (ELEX)
          CODER. DECODER. INTERROGATOR. TRANSPENDER GROUPS (ELEX)
OX OX-
          RADAR SET GROUPS (ELEX/ORD)
OY OY-
OZ OZ-
          RADIO SET GRCUPS (ELEX)
          NOT ASSIGNED
CO
OL 99-401 NR-1 SUBMERSIBLE RESEARCH SHIP
02 99-AC2 ATS-1. 2. 3 (UNITED KINGDOM)
D3 99-A03 ORDNANCE FIRE CONTROL SWITCHING EQUIPMENT (HM&E/ORD)
04 99-AC4 DEEP DIVING SUBMERGENCE SYSTEM
C5 59-AC5 OCEANOGRAPHIC COMPONENTS
          TRANSCEIVER GROUPS
06
          SONAR SET GROUPS
07
08 97-003 ANTENNA SYSTEM-FLOATING WIRE
09 97-004 ANTENNA SYSTEM-HELICAL. LOOP OR WHIP
PA 50-033 PANEL-REMOTE VALVE OPERATING
PB 88-203 VALVE-MIXING. REFRIGERATION. AIR CONDITIONING AND COOLING
PC 50-0C1 PANEL-FUSE
         PRIME DRIVERS (ELEX)
PD PD-
PE 50-0C5 PANEL-COMMUNICATION
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CDC LAPL
  PF PF -
            FITTINGS-POLE (ELEX)
  PG PG-
            PIGECN APTICLES (ELEX)
            PHOTOGRAPHIC ARTICLES (ELEX)
  PH PH-
  PI 97-011 PERISCOPE-STADIMETER
  PJ 50-010 PANEL-POWER DISTRIBUTION AND/OR CONTROL (HM&E/ORD)
            PANEL-INDICATING (HM&E/ORD)
  PK
  PK 50-025 PANEL-INDICATING (HMEE/ORD)
  PL PL-
            PLUG-IN UNITS (ELEX)
  PM 41-072 PAPER SHREDDING MACHINE SEE ALSO CFF MACH ACC
  PN 25-004 PELORUS STANC SEE ALSO NAVIGATION ECUIPMENT ACC
  PO
            NOT ASSIGNED
  PP PP-
            POWER SUPPLY-ACAROTATING MACHINE TYPE (ELEX)
  PO 97-008 PERISCOPE-COLLIMATOR
  PR 97-009 DEPLUMERS, FAIRINGS AND SUPPORTS FCR SUBMARINE PERISCOPES AND MASTS
  PS 50-CC9 PANEL-ALARM
  PT PT-
            MAPPING AND PLOTTING UNITS (ELEX)
            POWER SUPPLY-POTATING (ELEX)
  PU PU-
  PV 41-047 CLEANING MACHINE-CLOCK AND WATCH
  PW 41-073 PINKING MACHINE
  PX 848
            PIPING SYSTEM HARDWARE
  PY 41-091 PLANER-METAL CUTTING
  PZ 97-010 PERISCOPE-SEXTANT
  PO 11-009 POWER SUPPLY-AN/SQS-26 SONAR
  P1 28-029 PLOTTING TABLE. MK NC2 MODO.2 & 3 SEE ALSO NAVIG EC (HM&E/CRD)
            SANITATION EQUIPMENT AND REPAIR PARTS
  P3 27-011 PMEUMATIC TUBE -SYSTEMS-COMMUNICATION
  P4 41-093 POLISHER-METALLURGICAL
  P5 41-095 POSITIONER-WELDING
  P6 41-094 POT-MELTING. ELEC
  P7 97-001 PERISCOPE-SUBMARINE
  P8 11-001 POWER SUPPLY-METALLIC RECTIFIER OR SEMICONDUCTOR DIODE TYPE
  P9 41-008 CLEANFR-STEAM PRESSURE JET
  DA 54-C10 PRINTING MACHINE-HEAT DEVELOPING
  OB 54-OC5 PRINTING PRESS-OFFSET
  QC 54-008 PRINTING PRESS-LETTER PRESS
  OD 54-019 PRINTING PRESS-LETTER
  OF 54-025 PRINTING PRESS-PROOF
  OF 99-028 PROBE AND CARRIER-FUELNG SEE ALSO FUEL CIL SYS ACC
  OG 54-017 PROCESSING MACHINE-BLUE PRINT
  OH 86-C13 PPOCESSING MACHINE-PHOTOGRAPHIC FILM
  10
            NOT ASSIGNED
  OJ 61-117 PROGRAM CONTROLLER
  OK 26-001 PROJECTION EQUIPMENT-MOTION PICTURE
  QL 26-002 PROJECTION ECUIPMENT-STILL PICTURE
  OM 83-030 PROPELLER ASSEMBLY-CONSTANT PITCH
  ON 64-007 RECHARGING UNIT-COZ PUMPING METHOD
  00
            NOT ASSIGNED
  OP 89-002 RESCUE CHAMBER AND RECOMPRESSION TANK
  00 55-002 REELING MACHINE-HOSE
  OR 32-039 REFRIGERATION SYSTEM-ABSORPTION
  OS 83-034 PROPELLER ASSEMBLY-CONTROLLABLE PITCH
     64-008 PROPORTIONER-FOAM LIO SEE ALSO DAMAGE CONTRL ACC
  QU 83-043 PROPULSION DRIVE UNIT-STERN
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OV 01-038 PUMP UNIT-PUMP AND ACCESSORIES INSTALLED AS A UNIT

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CW 88-213 VALVE-OVERFLCW
OX C1-O11 PUMP-CENTRIFUGAL. POWER DRIVEN
DY 32-023 REFRIGERATION-MECHANICAL
QZ 42-001 REGULATOR-ELECTRICAL (EXCPT ENGINE GENERATOR)
QO 88-231 VALVE-CROSS
Q1 01-017 PUMP-CENTRIFUGAL. POWER DRIVEN. CLOSE-COUPLED OR COUPLING DESIGN
02 88-245 VALVE-DIRECTIONAL INTERLOCK
03 88-248 VALVE-PILOT. PNEUMATIC CPERATED
04 01-001 PUMP-CENTRIFUGAL . BOILER FEED
05 88-249 VALVE-CONTROL THERMAL
06 41-048 CLEANING MACHINE-ELECTRIC AND DILBURNING
07 88-251 VALVE-LCW PUMP SECTION. SAFETY TRIP
Q8 88-252 VALVE-CENTROL AIR
09 01-014 PUMP-HAND DRIVE. OSCILLATING. RECIPROCATING OR ROTARY
RA 58-007 RACK-READY SERVICE
RB 52-029 RAM-HYDRAULIC
RC RC-
          REELS (FLEX)
RD RD-
          RECORDER/REPRCDUCERS (ELEX)
          RELAY ASSEMBLY UNITS (ELEX/ORD)
RE RE-
RF RF-
          RADIO FREQUENCY COMPONENTS (ELEX)
RG RG-
          CABLES. RF BULK-(ELEX)
RH 16-013 RECONDENSER SYSTER-NITROGEN AND OXYGEN
RI 834
          COMMISSARY EQUIPMENT
RJ 32-007 REFRIGERATION PURGE UNIT
RK 46-010 RECORDEP-PNEUMATIC AND ELECTRO-PNEUMATIC
          REELING MACHINES (ELEX/ORD)
PL RL-
RM 41-084 CLEANING MACHINE-TANK
RN 55-0C3 REEL-HOSE.
         RECORDERS (ELFX/CRD)
PO RO-
RP RP-
          REPRODUCERS (FLEX)
RQ 32-029 REFIGERATED TANK-FILM PROCESSING
          RFFLECTORS-EXCEPT ANTENNA REFLECTORS (ELEX)
PR RR-
RS 32-001 REFRIGERATION SYSTEM-MECHANICAL
RT RT-
          RECEIVER & TRANSMITTER (ELEX)
          DAMAGE CONTROL EQUIPMENT AND ACCESSORIES
RU C88
RV R-
          RECEIVERS (ELEX)
RW 42-002 REGULATOR-ENGINE GENERATOR. BATTERY CHRG. ELECTROMECH
RX 42-007 REGULATOR-ENGINE GENERATOR. BATTERY CHRG. ELEX
RY 42-100 REGULATOR-PRESSURE
RZ 42-101 REGULATOR-FLOW, BOILER FEED WATER
PO 88-253 VALVE-LINEAR DIRECTIONAL CONTROL WITH ACTUATOR
R1 42-102 REGULATOR-FLCW. FLOAT CPERATED. DRAIN/MAKE-UP VLV
R2 42-104 REGULATOR-PRESSURE DXYGEN SERVICE
P3 99-004 RECEPTACLE ASSEMBLY-CO2 ABSORBENT
R4 41-067 GRINDING MACHINE-UTILITY
R5 20-003 RESISTOP-VARIABLE
R6 20-004 RESISTOR-FIXED
R7 41-104 REWINDING AND INSULATION MACHINES
R8 20-CC1 RHEOSTAT
R9 88-254 VALVE-REGULATING, COMPRESSED GAS
          SWITCHING UNITS (ELEX)
SA SA-
          SWITCHBOARDS (ELEX)
SB SB-
SC 41-112 SANDER-BELT. DISK AND SPINDLE
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CDC LAPL
  SP 67-008 SANITATION EQUIPMENT SEE ALSO TOILET-MARINE
  SE 41-114 SAW-ARRASIVE-DISC. MASONRY
  SF 41-115 SAW-BAND
  SG SG-
            GENERATOR-SIGNAL (ELEX/ORD)
  SH S-
            SHELTER (ELEX)
  SI 54-016 COMPOSING MACHINE-PHOTO PRINTING
  SJ 41-120 SAW- POWER HACK
  SK 43-017 SAW BAND. MEAT CLTTING
  SL 41-078 SAW SETTING MACHINE
  SM SM-
            SIMULATORS (ELEX/ORD)
  SN SN-
            SYNCHRONIZERS (ELEX)
  SO
            NOT ASSIGNED
  SP 83-010 SEAL-SWIVEL JOINT TYPE
  SO 41-145 SFALING MACHINE-HEAT
  SR 07-029 HEATER-SPACE. MULTI-FUEL WITH BLOWER
  SS 87-006 SELECTOR-SPEED SENSITIVITY
  ST ST-
            STRAPS (ELEX)
            OPTICAL UNITS (ELEX)
  SU SU-
  SV 67-010 SEWAGE TREATMENT SYSTEM-MULTI TOILETS OR URINALS
  SW 41-080 SEWING MACHINE-HOUSEHOLD AND INDUSTRIAL
  SX 83-017 SHAFT-PRCPULSION. SHIP
  SY 41-119 SAW-JIG. WOCD WORKING
  SZ 83-002 SEAL-STERN TUBE SHAFT
  SO 43-023 SINK-SCULLERY
  SI 41-123 SHAPER-METAL CUTTING AND WOODWORKING
  SZ 41-096 BENDING CR FCLDING MACHINE-MANUAL
  S3 99-007 SHELL-MISSILE TURE
  S4 85-014 SHOCK ABSORBER-GAS. CIL OR PNEUMATIC
  S5 41-081 SHOE FINISHING AND STITCHING MACHINE
  56 391
            SHOP FOUIPMENT AND ACCESSORIES ON SHIPS
  $7 40-005 SHUTTER
  S8 41-125 SIEVE-FCUNDRY
  S9 43-052 SIFTING MACHINE-FLOUR. ELECTRIC
  TA TA-
            TELEPHONE APPARATUS (ELEX)
 TB TB-
            TOWED BCDY (FLEX)
 TC TC-
            TOWED CABLE (ELEX)
 TO TO-
            TIMING DEVICES (ELEX)
 TE 92-007 TANK-LIQUID STCRAGE
 TF TF-
            TRANSFORMERS (ELEX)
            POSITIONING DEVICES-TILT AND/OR TRAIN (ELEX)
 TG TG-
            TELEGRAPH APPARATUS (ELEX)
 TH TH-
 TI 61-107 TPANSDUCER-MCTIONAL PICKUP
 TJ 88-049 VALVE-MANEUVERING AND THROTTLE
            TOOL KITS (ELEX)
  TK TK-
  TL TL-
            TOOLS (ELEX)
  TM 88-250 VALVE-MANUAL RESET
            TUNING UNITS (ELEX)
 TN TN-
 TO
            NOT ASSIGNED
 TP AN/ A
            INVISIBLE LIGHT. HEAT RADIATION
 TO 52-012 TANK-ACCUMULATOR, HYDRAULIC
TR TR- TRANSDUCERS (ELEX)
            TEST AND MEASURING EQUIPMENT NOT CTHERWISE CLASSIFIED (ELEX/ORD)
 TS TS-
            TELETYPE WRITER AND FACSIMILE APPARATUS (ELEX)
  TT TT-
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TU 52-048 COMPENSATOR-HYDRAULIC
TV TV-
          TESTER-TUBE (FLEX)
          TAPE UNITS-USED FOR OPERATIONAL TEST AND CHECK OUT (ELEX)
TW TW-
TX T-
          TRANSMITTERS-ALL TYPES EXCEPT TELEPHONE (ELEX)
TY 31-006 TENSIONING DEVICE-COUNTERWEIGHT
TZ 46-002 TEST EQUIPMENT-ANALYZER
TO 41-149 PUMP-AIRLESS SPRAY PAINT
TI 46-006 TEST FIXTURES. SETS. STANDS AND CALIBRATORS. ALL TYPES
T2 41-150 CLEANER-VACUUM. FLECTRIC
T3 43-029 TOASTER-ELECTRIC. INTERMITTENT
T4 43-030 MIXER AND TANK-FLUID ELECTRIC
TS 43-058 FOOD CUTTER AND MIXER-ELECTRICAL
TO 43-061 COMPACTER-TRASH
T7 46-013 TORSION METER-PROPULSION SHAFTING
TB 48-010 FILTER-AIR. FLECTROSTATIC
T9 41-132 TEST FQUIPMENT-MISCELLANEOUS (HM&E/CRC)
UA U-
          CONNECTORS-AUDIO AND POWER (ELEX)
          LAUNDRY FOUIPMENT AND ACCESSORIES
US C35
UC C22
          STEERING GEAR. EMERGENCY
UD C21
          HYDRAULIC FILTER UNIT. PORTABLE
UE C30
          PORTABLE CLEATS
UF C23
         INDUSTRIAL GASES GENERATING. HANDLING AND STOWAGE
UG UG-
          CONNECTORS-RF (ELEX)
          DIRECTOR-WEAPON SYSTEM
UH
          NOT ASSIGNED
UI
UJ 88-014 VALVE-GATE. HYDRCCARBON FUEL SERVICE
UK 99-018 CABLE ASSEMBLY-ELECTRICAL
UL 99-031 DISPENSER-CHAFF
UM 88-032 VALVE-REFRIGERATION SHUT OFF 3/4 IN AND LARGER
UN 52-006 MISSILE HANDLING SYSTEM-HYDRAULIC
UO
          NOT ASSIGNED
UP 41-071 MAGNETIC INSPECTION UNIT PORTABLE
UQ 50-003 PANEL-TEST ELECTRICAL
UR C27
          CARGO HANDLING ACCESSORIES
US 50-GC6 PANEL-INTERICE COMMUNICATION
UT 50-008 PANEL-GYRO OR CEAD RECKONING CONTROL
UU 86-004 SAFELIGHT-DARKROCM. PHCTOGRAPHIC
UV 28-023 PLOTTING AND TRACING EQUIPMENT
UW 55-0C4 REEL-CABLE
UX 19-002 RELAY-ELECTRICAL SEE ALSO TEST EQUIPMENT
UY 55-OC1 REELING MACHINE-CABLE
UZ 46-003 RECORDEP-ELECTRICAL AND ELECTRONIC
UO 41-118 SAW-CIRCULAR
Ul
          SHIELD ASSEMBLY-WEAPON SYSTEM
          TRAIN POWER DRIVE ASSEMBLY-WEAPON SYSTEM
U2
U3
          ELEVATION POWER DRIVE ASSEMBLY-WEAPON SYSTEM
U4
          TRAIN TRANSMISSICN ASSEMBLY-WEAPON SYSTEM
          ELEVATION TRANSMISSION ASSEMBLY-WEAPON SYSTEM
U5
          TRAIN RECEIVER REGULATOR-WEAPON SYSTEM
U6
          ELEVATION RECEIVER REGULATOR-WEAPON SYSTEM
U7
          CONTROL ASSEMBLY-WEAPON SYSTEM
118
U9
          FUSE SETTER ASSEMBLY-WEAPON SYSTEM
VA 88-103 VALVE-BALANCING
VB 88-149 VALVE-ANGLE
VC 88-039 VALVE-ASTERN
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CDC LAPL
 VP 838
           ENVIRONMENTAL CONTROL SYSTEM SPARES AND REPAIR PARTS
 VE 68-CC1 VALVE-BALL
           CONTROL-LAUNCHER
 VF
 VG 88-038 VALVE-BUTTERFLY
 VH V-
           VEHICLES-CARTS. DOLLIES. VANS U/W ELECTRONIC EQUIPMENT (ELEX)
 VI 88-057 VALVE-GLCBE
 VJ 88-036 VALVE-CHECK
 VK 88-175 VALVE-SPECIAL
 VL 88-C19 VALVE-PILOT AND LINE PRESSURE OPERATEC. DIAPHRAGM AND PISTON TYPES
 VM 88-171 VALVE-RELAY AIR. DIAPHRAGM AND PISTCH TYPES
 VN 88-026 VALVE-EXPANSION
           NOT ASSIGNED
 VO
 VP 88-212 VALVE-FLOAT
 VQ 88-024 VALVE-FUEL DIL REGULATING
 VR 88-013 VALVE-GATE. ALL TYPES EXCEPT HYDROCARBON FUEL SERVICE
 VS VS-
           SIGNALING EQUIPMENT-VISUAL (ELEX)
 VT 88-124 VALVE-LINEAR. DIRECTIONAL CONTROL
 VU 88-189 VALVE-INSTANTANECUS HEATER
 VV 88-071 VALVE-NEEDLE
 VW 88-217 VALVE-PILOT CONTROL. BELLOWS AND SCLENOID OPERATED
 VX 88-033 VALVE-PLUG
 VY 88-020 VALVE-PRESSURE REGULATING. STEAM SERVICE
 VZ 88-025 VALVE-FLUSH
 VO 88-102 VALVE-ROTARY. DIRECTIONAL CONTROL
 VI 88-176 VALVE-EXHAUST AND RELIEF V2 88-191 VALVE-FEEDWATER REGULATING
 V3 87-013 VALVE - SEA, UNDERWATER LOG
 V4 88-152 VALVE-MAIN BALLAST
 V5 88-144 VALVE-MANIFOLD (EXCLUDES VALVE AND TRAP MANIFOLDS)
 V6 88-216 VALVE-SCLENCID
 V7 88-010 VALVE-TEMPERATURE REGULATING. AUTOMATIC OPERATION
 VS 89-166 VALVE-HINGE TYPE
 V9 88-055 VALVE-Y
 WA 91-001 WASHING MACHINE - LAUNDRY
 WB 41-086 WELDING AND BRAZING MACHINE - BAND SAW BLADE
 WC 82-002 WELDING MACHINE - RESISTANCE
           CABLE. 2 CONDUCTOR. NON-RF (FLEX)
 WD WD-
 WE 82-005 WELDING MACH-ARC, ADJUST, CONST VLTG CR CONST CURR TRANSFORER RECTIFIER
 WF WF-
           CABLE. 4 CONDUCTOR. NON-RF (ELEX)
 WG 82-001 WELDING SET - TUNGSTEN ARC.INERT GAS SHELDEC.NCNCONSUMABLE ELECTROCE
 WH 82-004 WELDING SET - ARC. INERT GAS SHIELDED. CONSUMABLE ELECTRODE
 WI
           NOT ASSIGNED
 WJ 82-007 WFLDING SET - STUD. ELECTRIC ARC
 WK 62-001 WINCH - HAND CPERATED
 WL 62-002 WINCH - STEAM OPERATED
           CABLE. MULTIPLE CONDUCTOR. NON-RF (ELEX)
 WY WM-
 WN 62-004 WINCH - ELECTRC - HYDRAULIC
 WO
           NOT ASSIGNED
 WP 62-006 WINCH - ENGINE DRIVEN. GASOLINE OR CIESEL
 WO 62-OCT WINCH - PNEUMATIC DRIVE
 WR 41-087 WINDING MACHINE COIL
 WS WS-
           CABLE. SINGLE CONDUCTOR. NON-RE (ELEX)
           CABLE. 3 CONDUCTOR. NON-RF (ELEX)
 WT WT-
 WU 63-CC3 WINDLASS - ELECTRICAL MECHANICAL SEE ALSO ANCHOR HANDLING ACCESSORIES
 WV 63-004 WINDLASS - HAND OPERATED SEE ALSO ANCHOR HANCLING ACCESSORIES
 WW 31-025 WINDOW - OBSERVATION. OPTICAL. PORTLIGHT
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WX 99-001 WINDOW - NON ICING
WY 35-001 WIPER-WINDOW PILM. RTY OR VERT TYPE. ELEC OR MNL (HM&E/ORD)
WZ 35-002 WIPER - WINDOW. PENDULUM TYPE. PNEUMATIC
          FIRING CUTOUT ASSY-WEAPON SYSTEM
WO
          CARRIAGE ASSEMBLY-WEAPON SYSTEM
WI
W2
          STAND ASSEMBLY-WEAPON SYSTEM
W3
          SLIDE ASSEMBLY-WEAPON SYSTEM
          RAMMER ASSEMBLY-WEAPON SYSTEM
W4
          HOUSING ASSEMBLY-WEAPON SYSTEM
W5
          GUN BARPEL ASSEMBLY-WEAPON SYSTEM
W6
          GAS EJECTOR ASSEMBLY-WEAPON SYSTEM
W7
          EMPTY CASE EJECTOR ASSY-WEAPON SYSTEM
W8
W9
          HOIST ASSEMBLY-WEAPON SYSTEM
          COMPRESSOR GAS TURBINE REPAIR PARTS
XA COO
          BULKHEADS-STRUCTLRAL
XB
XC
          CANVAS
XD
          DECK COVERINGS
          MISCELLANEOUS FLAG ALLOWANCES. MESSING GEAR
XE E34
XF C36
          SURVIVAL EQUIPMENT
XG C41
          LIFTING AND HANDLING GEAR MAIN AND AUXILIARY MACHINERY
          TOOLS AND ACCESSCRIES MAIN PROPULSION SHAFTING
XH C43
XI C38
          ENVIRONMENTAL CONTROL SYSTEM APPLIANCES
XJ C47
          PUMPS. PCRTABLE
XK C51
          BOILER TOOLS AND ACCESSCRIES
XL C58
          TOOLS AND ACCESSCRIES DISTILLING PLANT
          TOOLS AND ACCESSCRIES REFRIGERATION SYSTEM
XM C59
XN
          DOOR-NON STRUCTURAL
XO
          NOT ASSIGNED
          HOSE AND MISCELLANEOUS HOSE FITTINGS
XP C48
X9 C61
          TOOLS AND ACCESSCRIES GENERATORS
XR C18
          RIGGING
          SHEATHING
XS
XT C62
          TOOLS AND ACCESSCRIES ELECTRIC POWER DISTRIBUTION
          LIGHT EXTENSION
XU C64
XV C65
          PORTABLE INTERIOR COMMUNICATION EQUIPMENT
XW C66
          LIGHT SIGNAL PCRTABLE
XX C67
          ELECTRICAL AND ELECTRONIC HAND TOOLS
XY C69
          IDIC SUPPORT EQUIPMENT
XZ C70
          FLAGS AND PENNANTS
          ASROC/TORPEDC/MINE HANDLING
XO C75
X1
          DECK
          DOME-SONAR(STRUCT AND NON STRUCT)
X2
          BALLAST
X3
X4
          PLATFORM DECK
X5
          FLAT
          NBC WARFARE EQUIPMENT
X6 C77
X7 C81
          MINESWEEPING EQUIPMENT
          AIRCRAFT HANCLING AND STOWAGE
X8 C83
          PROJECTION EQUIPMENT AND ACCESSORIES
X9 C85
YA 54-009 TABLE-LITHOGRAPHIC LAYOUT
YB 60-006 STEERING GEAR
YC 46-CII TRITIUM AIR MCNITOR
YD 85-C36 TROLLEY - MONCRAIL AND BI-RAIL
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YE 85-018 TRUCK/DOLLY/ CRADLE ASSEMBLY SEE ALSC CARGO HNDL ACCY (HM&E/ORD)

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YF 41 .39 TUBE AND FLUE CLEANER - AIR MOTOR CRIVEN
 41-140 TUBE AND FLUE CLEANER - ELECTRIC MCTCR DRIVEN
YH 05-001 TURBINE-STEAM. MAIN PROPULSION
          NOT ASSIGNED
YI
YJ 61-029 CONTROL PANEL-AUTOMATIC OR MANUAL
YK 61-048 ELECTRONICS SUB-ASSEMBLIES
YL 82-003 WELDING MACHINE - ARC. DRIVEN BY GAS CR DIESEL INTERNAL COMBUST ENGIN
YM 61-C65 INDUCTOR-VERNIER
YN 82-005 WELDING MACHINE - ARC. ELECTRIC MOTOR DRIVEN
YO
          NOT ASSIGNED
YP 62-003 WINCH - ELECTRIC
YO 63-001 WINDLASS - STEAM DRIVEN SEE ALSO ANCHOR HANDLING ACCESSORIES
YR 05-006 TURBINE-STEAM. AUXILIARY
YS C5-C22 TURBINE - WATER CRIVEN
YT 05-028 TURBINE - GAS. PROPULSION AND AUXILIARY SERVICE OVER 2000 HORSEPOWER
YU 35-029 TURBINE - GAS. PROPULSION AND AUX SERV 2000 HORSEPOWER OR UNDER
YV 05-025 TURBINE AND FAN. INTEGRAL FORCED DRAFT AIR SERVICE FOR MAIN BCILER
YW C5-019 TURBINE CONTROL - PROPULSION
YX 05-024 TURBO/SUPERCHARGER - DIESEL ENGINE
YY 85-003 TURNTABLE - TROLLEY OR BALL TYPE. MANUAL OR POWER DRIVEN
YZ 85-009 TORPEDO HANDLING UNIT (HMEE/ORD)
YO C12
          HULL FITTINGS. LASHING GEAR AND ACCESS CLOSURES
Y1 53-002 CAPSTAN-POWER CPERATED. ELECTRIC OR HYDRAULIC
Y2 63-002 WINDLASS - ELECTFIC HYDRAULIC SEE ALSO ANCHOR HANDLING ACCESSORIES
Y3 C87
          TEST. MEASURING AND INDICATING EQUIPMENT
Y4 C90
          RADIATION MONITORING AND COUNTERMEASURES
Y5 C93
          SHIPBOARD FIREFIGHTING AND ACCESSORIES
          DRONANCE TOCLS AND ACCESSORIES (AEL/CRD)
Y6 A00
          WELDMENT
Y7
Y8 C94
          SALVAGE TOOLS AND EQUIPMENT
Y9 C95
          DIVING EQUIPMENT
ZA 61-086 STAND. CONTROL-STEERING
ZB 61-087 STAND. CENTREL PROPULSION
ZC 91-009 STARCH CCCKER-LAUNDRY
ZD 61-482 VALVE OPERATOR-HYDRAULIC OPERATOR
ZE 34-001 STARTER-ENGINE. ELECTRICAL
ZF 34-002 STARTER-ENGINE. HYDRAULIC
ZG 34-0C3 STARTER-ENGINE. DIRECT COMBUSTION AND/OR GAS TURBINE
ZH 34-005 STARTER-ENGINE.AIR MOTOR OR AIR TURBINE TYPE
          NOT ASSIGNED
ZI
ZJ 60-001 STEERING GEAR-ELECTRO-HYDRAULIC.MARINE.LINK.TILLER TY P
ZK 60-003 STRNG GEAR-ELEC MCH. MRN. DRMECBL/CBLECC. GREOC. HND OP TY
ZL 60-007 STEERING GEAR-ELECTRIC. STEER MOTOR-CHAIN DRIVE TYPE
ZM ZM-
          IMPEDANCE MEASURING DEVICES (ELEX)
ZN 60-008 STEERING GEAR-EMERGENCY SUBMERSIBLE TYPE
          NOT ASSIGNED
ZO
ZP 61-027 STEERING HEAC-GYROPILOT
ZO 54-020 STITCHER-BOOK AND PAMPHLET
ZR 64-005 STRAINER-PRESSURE.FIRE HOSE WITH BALL VALVE
ZS 64-014 FIRE EXTINGUISHING SYSTEM-TWIN AGENT
         TOOLS AND EQUIPMENT MISCELLANEOUS
ZT C99
ZU 64-015 FIRE EXTINGUISHING UNIT-DRY CHEMICAL
         DSRV RESCUE CENTROL CENTER
ZV D39
ZW 64-016 NOZZLE ASSEMBLY-TWIN AGENT
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ZX 41-113 SAND MULLER
ZY 75-001 STRAINER-SEDIMENT
          MISCELLANFOUS ITEMS NOT CTHERWISE CCDED
27
          MISCELLANEOUS FLAG ALLOWANCES. NAVIGATION INSTRUMENTS
20 E24
ZI 61-072 CONTROL-HUMICITY
22 41-129 SURFACER-WCODWORKING
23 85-027 SWAY BRACE ASSEMBLY-ELECTRIC CHAIN HOIST DRIVE
Z4 89-0C5 SWIMMERS RECEVERY SYSTEM
25 E36
          MISCELLANEOUS FLAG ALLCWANCES. VACUUM CLEANER
Z6 61-074 COMPUTER-SHIPBCARD
27 E85
          MISCELLANEOUS FLAG ALLOWANCES. PROJECTION EQUIPMENT
28 61-389 BELLOWS ASSEMBLY-PRESSURE RELIEF
29
          NOT ASSIGNED
OA
          NOT ASSIGNED
08
          NOT ASSIGNED
          TELEMETERING SETS
OC.
00
          NOT ASSIGNED
OF
          NOT ASSIGNED
OF
          NOT ASSIGNED
OG
          NOT ASSIGNED
HO
          NOT ASSIGNED
          NOT ASSIGNED
10
LO
          NOT ASSIGNED
OK
          NOT ASSIGNED
OL
          NOT ASSIGNED
OM
          NOT ASSIGNED
          NOT ASSIGNED
ON
00
          NOT ASSIGNED
OP
          NOT ASSIGNED
CO
          NOT ASSIGNED
          ORDALTS AND CRONANCE MODIFICATIONS-CTHER THAN SWITCHBOARC
OR OR
OS RS
          ORDALTS AND ORDNANCE MODIFICATIONS-SWITCHBOARD ONLY
OT
          NOT ASSIGNED
          NOT ASSIGNED
OU
OV
          NOT ASSIGNED
OW
          NOT ASSIGNED
OX
          NOT ASSIGNED
          NOT ASSIGNED
GY
OZ
          NOT ASSIGNED
OO NLAPLW NLAPLW-ITEM LISTED BY SPCC AS NOT LAPL WORTHY
OO INCOMP INCOMP-ITEM LISTED BY SPCC AS INCOMPLETE
O1 06-OC1 COMPRESSOR-RECIPROCATING. OTHER
02 06-CC4 COMPRESSOR-CENTRIFUGAL. REFRIGERATION
03 06-201 COMPRESSOR-RECIPROCATING. AIR. HIGH. PRESSURE
04 06-202 COMPRESSOR-RECIPROCATING, AIR. LOW. PRESSURE
05 06-2C3 COMPRESSOR-CENTRIFUGAL. AIR. LOW PRESSURE
06 C6-2C4 COMPRESSCR-RCTARY. AIR. LOW PRESSURE
07 C6-5C1 COMPRESSCR-VAPER ROTARY
          AVIATION ORDNANCE EQUIPMENT
08
09 04-001 CONDENSER-REFRIGERATION. WATER. COOLEC
          VALVE-SCUPPER (INCL. DECK DRAIN VALVES)
IA
18 41-CO4 BOOTH-SPRAYING
1C 39-005 CLUTCH-FRICTICN
10 B37
          PROPANE GAS AND CYLINDERS
16
          MACK
1F 14-007 FUSE UNIT ASS
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CDC LAPL
  16 41-045 GRINDING MACHINE-UTILITY (INCL BUFFNG CAPABILITY)
  IH 16-006 HYPOCHLORINATION UNIT
  11
            NOT ASSIGNED
  1J 01-012 PUMP-FUEL. ALL TYPES INCLUDING ELECTRIC CRIVE DESIGN
  1K 54-001 PUNCHING MACHINE-PAPER
  1L 61-049 SYNCHRO-RECEIVER. TRANSMITTER. RECEIVER. TRANSMITTER
  IM 17-018 MOTOR-ACIDE MAIN PROP. UNLIMITED HERSEPEWER
  IN C32
            FURNISHINGS AND CUTFITTINGS
            NOT ASSIGNED
  10
  1P 39-003 POWER TAKE CFF-ACCESSORY DRIVE
  10 01-005 PUMP-POTARY. POWER DRIVEN
  IR 43-057 RINSER-SANITIZER
  15 86-GC1 SINK-PHOTOGRAPHIC PROCESSING
  IT 01-013 PUMPING UNIT-CENTRIFUGAL. POWER DRIVEN. AIRCRAFT FUELING
  10
            HEAD-SPRINKLER-FIRE PROTECTION
  IV 88-004 VALVE-SAFETY RELIEF. MAIN PROPULSION BOILER
  1W
            NOT ASSIGNED
  1X 52-014 CYLINDER-ACTUATING LINEAR SEE ALSO JACK ASSEMBLY/SHCK AB
  1Y 57-0C8 CRANE-ASROC MISSILE
            NOT ASSIGNED
  12
  10
            NOT ASSIGNED
  11 C4-1CO CONDENSER-STEAM. ALL TYPES
  12 01-003 PUMP-CENTRIFUGAL. MAIN CONDENSER CIRCULATING
  13 01-004 PUMP-ROTARY. POWER DRIVEN. CAM AND PLUNGER CESIGN
  14 C1-006 PUMP-ROTARY. POWER DRIVEN. IMPELLER CESIGN WITH TIMING GEARS
  15 01-007 PUMP-ROTARY. POWER DRIVEN. EXTERNAL GEAR DESIGN
  16 32-009 CONDENSING UNIT-REFRIGERATION
  17 99-023 CONNECTOR-ELECTRICAL SEE BOX-ELECTRICAL
  18 61-030 CONSOLE-CONTROL AND POWER
  19 C9-004 CONTROL-BATTERY CHARGER
            LAUNCHING SYSTEM (MISSILE/ROCKET)
  24
  28 99-008 BOX-ELECTRICAL (HM&E/CRD)
  2C 39-006 CLUTCH-MAGNETIC
  20 844
            PROPELLER. SPECIAL TOOLS AND HANDLING GEAR
            LAUNCHERS (MISSILE/RCCKET)
 2E
  2F B50
            GOVERNOR OVERSPEED SPARES
  2G 25-024 GYRO COMPASS-ARMA MK 7.8.9.10.21.22.24.8 26
  2H 31-003 HATCH COVER
 21
            NOT ASSIGNED
  21
            ANTI-ICING SYSTEM
  2K 41-074 PUNCHING. SHEARING. AND NIBBLING MACHINE-METAL
  2L 32-034 SEPARATOR-DIL. REFRIGERANT
  2M 41-C89 MOTOR-PNEUMATIC
  2N 83-037 OIL DISTRIBUTION BOX OR OIL INJECTOR ASSEMBLY
  20
            NOT ASSIGNED
  2P 52-047 POWER UNIT-HYDRAULIC
  20 39-OC1 CLUTCH-POSITIVE CRIVE AND ROTATING ELEMENT
  2R 41-075 RIVETING MACHINE-ELECTRIC OR PNEUMATIC
  25 41-082 SKIVING AND BEVELING MACHINF-SHOE. SOLE. HAND OPERATED
  2T 41-085 THREADING MACHINE-PIPE AND BOLT SEE ALSC SHOP ACCESSORIES-TOOLS X ECP
            MAGAZINES-WEAPCN SYSTEM
  20
  24
            GUN MOUNTS
  2W
            NOT ASSIGNED
            CASTING
  2X
    57-009 CRANE-ELECTRO HYDRAULIC
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22 21-011 SWITCH-FLOAT. LIGUID LEVEL. FLOW DETECTING
20 61-008 CONTROL-STEERING SYSTEM
21 61-009 CONTROL-MECHANICAL
         NOT ASSIGNED
22
23 61-015 CONTROL-NAVIGATIONAL LIGHT
24 61-022 CONTROL-ACQUISTIC DEVICE
25 61-024 CONTROL-MECHANICAL PUSH PULL STROKE
26 61-026 CONTROL-ELECTRIC LIGHT
27 61-040 CONTROL-VALVE CPERATOR
28 61-064 CONTRCL-HUMICITY
29 61-067 CONTROL-REMOTE TRANSMITTERS AND RECEIVERS
          NOT ASSIGNED
38 80-001 BRAKE-ELECTRIC. SHOE OR DISC. SOLENOID
3C 39-007 CLUTCH-MAGNETIC PARTICLE
          PROPULSION MAIN CRIVE CIESEL ENGINE ECUIPMENT AND ACCESSORIES
3F
          NOT ASSIGNED
3F
          FRAME-STRUCTURAL
3G 25-028 GYRO COMPASS-SPERRY MK 11. 14. 17. 18. & 19
      NOT ASSIGNED
3H
          NOT ASSIGNED
3J 21-018 SWITCHING UNIT-PCWER TRANSFER
3K 76-001 PURIFIER-CENTRIFUGAL
3L 93-009 SEPARATOR MOISTURE
3M 52-046 MOTOR-HYDRAULIC
3N 01-018 PUMP-CENTRIFUGAL. SINGLE STAGE. CLOSE-CCUPLEC. NAVY STD
         NOT ASSIGNED
3P 61-091 POWER UNIT-GYRC PILOT
30 01-009 PUMP-ROTARY. POWER DRIVEN. VANE DESIGN. FIXED CR VAR DELIVERY
3R 87-002 RODMETER-UNDERWATER LOG SYSTEM
35 32-020 SODA FOUNTAIN
3T 61-056 THRUSTOR-MOTOR CRIVEN. HYDRAULICALLY CPERATED
3U 858 DISTILLING PLANT ACCESSORIES
3V 16-016 VAPORIZER SYSTEM - LIQUID DXYGEN OR NITROGEN
3W AN/ C CARRIER
3X C6-0C5 COMPRESSOR-RECIPROCATING. REFRIG. VERT OPR.SEMI-HERM
3Y 57-010 CRANF STERN
3Z AN/ D RADIAC
30 61-071 CONTROL-PHOTOELECTRIC CELL
31 61-079 CONTROL-CONSTANT FREQUENCY
32 61-096 CONTROL-TRANSMISSION REVERSING MECHANISM
33 61-108 CONTROL-PERISCOPE
34 61-110 CONTRCL-SENSCR. CEPTH AND TRIM
35 61-402 CONTROL-FLAME FAILURE
36 61-444 CONTROL-GENERATOR. CCOLER FEEDWATER
37 61-481 CONTROL-SERVC. CONTROLLABLE PITCH PROPELLERS
38 87-0C4 CONTROL-UNDERWATER LOG
39 61-019 CONTROL TRANSMITTER-PRESSURE DIFFERENTIAL
44 AN/ G TELEGRAPH OR TELETYPE
          BULKHEAD-NONSTRUCTURAL
48
4C 39-013 CLUTCH- ALL CTHER TYPES
4D 31-019 DOOR-MISSLE TUBE
4E AN/ I INTERPHONE AND PUBLIC ADDRESS
          FORGING
4F
4G 25-039 GYRO COMPASS-SPERRY MK 23 AND 27
4H AN/ J ELECTROMECHANICAL OR INERTIAL WIRE COVERED
          NOT ASSIGNED
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CDC LAPL 4) 22-001 SWITCHBOARD-DEGAUSSING 4K 61-012 CONTROL-DEGAUSSING 4L 61-011 SERVE GEAR TRAIN 44 18-001 MOTOR GENERATOR 4N 31-002 OPERATING MECHANISM-DOCK.RAMP.STERNGATE & BRIDGE 40 NOT ASSIGNED 4P 41-069 PRESS-GROMMET AND EYFLET 40 AN/ K TELEMETERING (ELEX/ORD) 4R 31-019 RUDDER-INCLUDING STOCKS. POSTS AND CARRIERS 45 41-127 SOLDER AND CESCLEER UNIT-ELECTRIC 4T 61-005 TIMER 4U AN/ L COUNTER YEASURES 4V 43-014 VEGETABLE PEELING MACHINE - ELECTRIC 4W AN/ M METECROLOGICAL CLOTHING STANDARC OUTFIT. AIR PURIFICATION AND LIFE PRESERVERS 4X C33 4Y 57-011 CRANE-HEAVY EQUIPMENT 4Z 01-019 PUMP CENTRIFUGAL . POWFR DRIVEN . PERIPHERAL CESIGN 40 61-075 CONTROL-STEERING AND DIVING ASSEMBLY 41 61-C62 CONTROL-PNEUMATIC 42 61-066 CONTROL-TELEMOTOR STEERING 43 61-089 CONTROL-SPLIT PLANE 44 61-132 CONTROL-FEED WATER SYSTEM 45 61-251 CONTROL- PRESSURE. TEMP. LEVEL AND FLOW 46 83-040 CONTROL-CONTROLLABLE PITCH PROPELLER 47 15-002 CONTROLLER/STARTER. AC 48 AN/ N SOUND IN AIR RADAR 49 AN/ P 54 ANY O SONAR AND UNDERWATER SCUND 58 80-002 BRAKE-ELECTRIC. MOTOR CPERATED 5C 43-C15 COFFEE MAKER 50 31-017 DOOR-HINGED TYPE. POWER OPERATED SE AN/ R RADIO FOUNDATION 5G 25-008 GYRO COMPASS EQUIPMENT-AMPLIFIER-SYNCHRO SIGNAL SH AN/ S SPECIAL TYPES MAGNETIC. ETC.. CR CCMBINATIONS OF TYPES NOT ASSIGNED 5J 22-002 SWITCHBOARD-INTERIOR COMMUNICATION PLATFOR M-SERVICE 5L STRUCTURE-DECKHOUSE 5M AN/ T TELEPHONE (WIPE) 5N 28-009 OPTICAL NAVIGATIONAL AIDS ALSO SEE SPECIFIC EOPMT 50 NOT ASSIGNED 5P 41-058 PRESS-HYDRAULIC. MANUAL CR POWER CPERATED 50 01-008 PUMP-ROTARY. PCWER DRIVEN. INTERNAL GEAR DESIGN HYDRAULIC SYSTEM TOOLS AND REPAIR PARTS 5R 821

55 41-126 SOLDERING AND BRAZING OUTFIT. ELECTRIC

ST TRUNK-STRUCTURAL
SU AN/ V VISUAL AND VISIBLE LIGHT
SV 87-007 VENT. AIR - U/W LOG EQUIPMENT

50 AN/ X FACSIMILE OR TELEVISION

SY 57-013 CRANF-GANTRY

51 AN/ Y DATA PROCESSING

5Z 862

PORTABLE STORAGE BATTERIES AND POWER DISTRIBUTION ACCESSORIES

5W AN/ W ARMAMENT (PECULIAR TO ARMAMENT. NOT CTHERWISE COVERED)
5X 01-021 PUMP-CENTRIFUGAL. TURBINE DRIVEN. GASCLINE SERVICE

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CDC LAPL
            AUTOMOTIVE & CONSTRUCTION EQUIPMENT (INCL ALL COMMODITY CLASS 95)
  52
            MISC. PARTS LISTS FOR SHIPS (INCL ALL APLS STARTING WITH 89000)
  53
  54
            MAINTENANCE & REPAIR SHIP EQUIPMENT (INCL ALL COMMODITY CLASS 12)
  55
            CHEMICAL WARFARE EQUIPMENT (INCL ALL COMMODITY CLASS 47)
            SICK-BAY EQUIPMENT (INCL ALL COMMCDITY CLASS 84)
  56
  57 01-020 PUMP-CENTRIFUGAL. POWER DRIVEN. HCRIZCHTAL. SPLIT CASE DESIGN
  58
            RIGGING & RIGGING GEAR (INCL ALL CCMMCDITY CLASS 90)
  59
            CONSTRUCTION EQUIPMENT (INCL ALL COMMODITY CLASS 96)
  6A 99-015 ARRESTOR-ELECTRICAL
  68 01-028 PUMP-CENTRIFUGAL. TURBINE DRIVEN, HCRIZCHTAL. CLOSE-COUPLED
  6C 54-023 COLLATOR
  60 31-008 DOOR-METAL SLIDING
            SPECIAL POWER PLANT EQUIPMENT (INCL ALL COMMODITY CLASS 98)
  6F
            NOT ASSIGNED
  6G 25-010 GYRO COMPASS EQUIPMENT-ALARMS-AUDIBLE & VISIBLE
            NOT ASSIGNED
  6H
            NOT ASSIGNED
  61
  6J 22-004 SWITCHBOARD-PRCPULSION
  6K
            PYROTECHNIC EQUIPMENT
            SEA CHEST
  6L
  6M E99
            MISCELLANEOUS FLAG ALLOWANCES, FURNITURE AND MISC. EQUIPMENT
  6N 87-012 OSCILLATOR AND AMPLIFIER-U/W LOG EQUIPMENT
            NOT ASSIGNED
  60
  6P 41-100 PRESS-ARBOR. MANUAL OPERATION
  60
            NOT ASSIGNED
  68
            NOT ASSIGNED
  65 61-046 SDLENDID-FLECTRIC
  6T 43-026 TOASTER-ELECTRIC
            NOT ASSIGNED
  6V 31-020 VENTILATER - DECK
            NOT ASSIGNED
  6W
  6X B16
            ACCESS CLOSURES CPERATING SPARES
  6Y 57-016 CRANE-KINGPOST
            NOT ASSIGNED
  6Z
  60 15-010 CONTROLLER. DC
            NOT ASSIGNED
  61
  62 25-014 CONVERTER-SIGNAL DATA
  63 01-022 PUMP-CENTRIFUGAL. POWER DRIVEN. FCR CCMMERCIAL DISHWASHING MACHINE
  64 01-023 PUMP-CENTRIFUGAL. POWER DRIVEN, SUBMARINE TRIM AND DRAIN SERVICE
  65 59-006 CONVEYOR-POWER OPERATED. BELT OR VERTICAL TRAY TYPE
  66
            NOT ASSIGNED
  67 03-001 COOLER-FLUID. SHELL/TUBE CONSTRUCTION
  68 01-026 PUMPING UNIT-CENTRIFUGAL. ELECTRIC MCTOR DRIVEN. FOR STEAM SYSTEMS
  69 03-002 COOLER-FLUID. TYPE B
            APPENDAGES-SHELL
  74
  78 80-003 BRAKE-PNEUMATIC
  7C 41-009 COLLECTOR UNIT-DUST
  7D 43-C54 DOUGH INTERMEDIATE PROOFING MACHINES
  7F
            NOT ASSIGNED
  7F
            NOT ASSIGNED
  7G 25-011 GYRO COMPASS EQUIPMENT-CABINET-GYRO & GUID CCMP STOR
  7H
            NOT ASSIGNED
            NOT ASSIGNED
  71
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7J 22-009 SWITCHBCARD-ALARM 7K NOT ASSIGNED

STANCHIONS

7K 7L

7M 51-UC6 MUUNT-RESILIENT 7N 41-090 OVEN-THERMAL DRYING. ELECTRIC NOT ASSIGNED 70 7P 44-008 PRESSURE REDUCING STATION 70 NOT ASSIGNED 7R NOT ASSIGNED 75 81-OCL SOOT BLOWERS 71 TORPEDO TUBE ASSEMBLY 71 NOT ASSIGNED 7V 61-054 VFRTICAL REFERENCE NOT ASSIGNED 7X NOT ASSIGNED 7Y 41-039 CUT-OFF MACHINE-ABRASIVE DISK. METAL CUTTING 72 21-023 SWITCH-PRESSURE AND/CR THERMOSTATIC 70 03-003 COOLER-FLUID . FNGINE JACKET WATER HULL MCUNTEC 71 03-004 COOLFR. FLD SMPL WTR TYPE I SHL/CL DSN. TYP II DB TB 72 C3-006 COOLER. AIR 73 03-011 COOLER-FLUID. RACIATOR ENGINE COOLANT 74 03-015 COOLER-AMINE 75 32-011 COOLER-AIR FLCK UNIT 76 32-010 COOLING COIL-AIR. DUCT TYPE AND GRAVITY TYPE 77 46-OC5 COUNTERS AND TOTALIZERS NOT ASSIGNED 78 79 51-001 COUPLING-FLEXIBLE. SCUND ISOLATION 84 NOT ASSIGNED 88 80-0C4 ERAKE-MANUAL 8C 28-012 COMPASS COMPENSATING EQUIPMENT 8D 43-018 DOUGH MIXING MACHINES 8F NOT ASSIGNED 8F NOT ASSIGNED 8G 25-021 GYRO COMPASS EQUIPMENT-RELAY TRANSMITTER NOT ASSIGNED NOT ASSIGNED 8J 22-013 SWITCHBCARD-POWER NOT ASSIGNED 8K 8L B78 AMMUNITION HANDLING AND STOWAGE 8M 86-014 MOUNT-FILM SLIDE . PHOTOGRAPHIC 8N 43-019 RANGES AND OVENS-OIL BURNING-SEE ALSC GALLEY EQPMT NOT ASSIGNED 8P 29-003 PRIMER-ENGINE STARTING, ETHER INJECTION 80 01-002 PUMP-RECIPROCATING. DIRECT ACTING AND POWER DRIVEN NOT ASSIGNED 88 85 25-017 STABILIZER-GYRC 8T 67-009 TOILET-MARINE 8U NOT ASSIGNED 8V 26-004 VIEWER - STILL PICTURE 8W NOT ASSIGNED NOT ASSIGNED 8X 8Y 02-004 BOILER-AUXILIARY. HP STEAM. DIL FIRED 8Z 21-0C6 SWITCHES-GENERAL 80 01-032 PUMP UNIT-CENTRIFUGAL. POWER DRIVEN. PORTABLE (SELF-CONTAINED) 81 78-OC1 CCUPLING-FLEXIBLE. SHAFT 82 01-034 PUMPING UNIT-HYDRAULIC. AIR DRIVEN NOT ASSIGNED 83 84 01-035 PUMP-CENTRIFUGAL. PWR DRIVEN. (MULTI-STAGE) VERT DEEPWELL TURB DESIGN

85 01-036 PUMP-JET. MAIN PROPULSION

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86 01-037 PUMP-RECIPROCATING. AIR DRIVEN. MISCELLANEOUS SERVICE
87 78-004 COUPLING-FLEX. SHFT. AUXILIARY SERVICE
88 02-002 BOILER-AUXILIARY. HP STEAM, WATER TUBE
89 02-003 BOILER-AUXILIARY. HP STEAM, HORIZONTAL FIRE TUBE
          NOT ASSIGNED
94
98 80-0C5 BRAKE-HYDRAULIC
          COMP AR THENT
90
90 43-032 DOUGH PRCCESSING MACHINE-POWER AND MANUAL
9E
          NOT ASSIGNED
          NOT ASSIGNED
9F
9G 41-066 GRINDING MACHINE-TOOLS & CUTTERS
GH
          NOT ASSIGNED
16
          NOT ASSIGNED
9J 22-021 SWITCHBOARD-STATIC GROUP CONTROL
9K
          NOT ASSIGNED
9L
          SMALL ARMS
SM 79-OC1 MUFFLER
          GRATINGS. FLCCR PLATES
91
90
          NOT ASSIGNED
9P 86-002 PRINTER-PHOTOGRAPHIC
90
          NOT ASSIGNED
9R
          NOT ASSIGNED
95 31-029 STABILIZER-ACTIV FIN. RETRCTBLE & NCNRETRCTBLE
9T C25
          TOWING GEAR
90
          NOT ASSIGNED
9V 86-006 VIEWER PRINTER - MICROFILM
          NOT ASSIGNED
94
9X
          NOT ASSIGNED
9Y 54-013 CUTTER-PAPER. GUILLOTINE
92
          NOT ASSIGNED
          NOT ASSIGNED
90
91 820
          WINCHES AND CAPSTANS REPAIR PARTS
92 78-011 COUPLING-RIGID. SHAFT
93 78-009 COUPLING-HYDRAULIC
94 78-012 COUPLING-CLAMP PIPE
95 78-013 COUPLING-ELECTRIC INDUCTION
96 93-018 COUPLING-HOSE.MISC SEE ALSO UNDWAY REPLEN ACC
97 57-OC1 CRANE-BRIDGE CR CVERHEAD TRAVELING
98 57-002 CRANE-QUARTER
99 57-0C3 CRANE-JIB
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